

13.187-

REPORT

ON

THE FEVER AT BOA VISTA,

BY

James O'Hurston
DR. MC WILLIAM.

*Presented to the House of Commons, in pursuance of their Address of the
16th March, 1847*

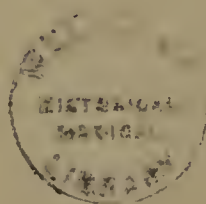


LONDON:
PRINTED BY T. R. HARRISON.

305314

LIST OF PAPERS.

| | | | | | | Page |
|--|----|----|----|-----------|----------|------|
| Sir W. Burnett to the Secretary to the Admiralty | .. | .. | .. | October | 30, 1846 | 3 |
| Six Inclosures. | | | | | | |
| 1. Sir W. Burnett to Dr. McWilliam | .. | .. | .. | January | 31, — | 3 |
| 2. Instructions to Dr. McWilliam | .. | .. | .. | January | 31, — | 4 |
| 3. The Governor-General of the Cape de Verds to the Portuguese Consul-General at Gibraltar | .. | .. | .. | January | 27, — | 5 |
| 4. Mr. Macaulay to the Earl of Aberdeen | .. | .. | .. | December | 24, 1845 | 5 |
| 5. Consul Rendall to the Earl of Aberdeen | .. | .. | .. | December | 22, — | 6 |
| 6. Dr. McWilliam to Sir W. Burnett | .. | .. | .. | September | 17, 1846 | 7 |
| Report. | .. | .. | .. | .. | .. | 8 |



Report of Dr. McWilliam on the Fever at Boa Vista.

Sir William Burnett to the Secretary to the Admiralty.

Sir,

Admiralty, October 30, 1846.

DR. J. O. McWILLIAM, Surgeon, Royal Navy, who was, in February last, sent to the Island of Boa Vista in Her Majesty's ship "Rapid," at my particular and earnest request to their Lordships, to make an impartial inquiry into all the circumstances of the supposed introduction of fever into that island from the crew of Her Majesty's ship "Eclair," having returned to England some time ago, and transmitted to me the accompanying report, I beg to lay the same before their Lordships, together with copies of the letter and instructions the doctor received from me for his guidance. Also an extract of a letter from the Governor-General of the Cape de Verd Islands, published in the "Gibraltar Chronicle," and likewise extracts of letters from Mr. Macaulay and the British Consul, residents on the Island of Boa Vista, distinctly showing the very remarkable state of the weather preceding the attack of the inhabitants of the island, (which very important circumstance in a case of this kind I regret to observe Dr. McWilliam has omitted to take any particular notice of,) which attacks do not appear to have taken place till a month after the departure of the "Eclair."

Dr. McWilliam appears to have taken considerable pains to gain information; but after a careful perusal of the papers he has sent I am compelled to say that I cannot conscientiously arrive at the conclusion the Doctor has done, viz., "That the fever was occasioned by the intercourse with the 'Eclair,'" which is, however, the chief point on which we differ; agreeing with all my late reports to their Lordships on the same subject; and also in conformity with a former report of mine to their Lordships respecting the case of His Majesty's ship "Bann," in the year 1824.

I have, &c.,

(Signed)

W. BURNETT,
Director-General.

Inclosure 1.

Sir William Burnett to Dr. McWilliam.

Sir,

Admiralty, January 31, 1846.

THE Right Honourable the Lords Commissioners of the Admiralty having determined that you should proceed to Boa Vista in Her Majesty's ship "Rapid," for the purpose of making an inquiry into all the circumstances attending, or supposed to have attended, the late visit of the "Eclair" to that island, when suffering under an attack of fever, contracted while stationed on the coast of Africa, you are to proceed thither in that vessel, which is reported ready for sea on the 1st of February, and which vessel their Lordships have directed to convey you thither, where,

without the vessel's communicating with the shore, you will, with your luggage, be placed in a shore boat and landed for the purpose of inquiry; and the "Rapid" having been ordered to remain twenty-four hours off Boã Vista, for the purpose of receiving from you an account of the state of health of British subjects there residing, and whether they are in want of any assistance which may be sent to them from other places; you will take care to furnish the captain of that ship with the necessary information, and you are to take care to communicate with me at all opportunities during the progress of the inquiry.

As their Lordships will repay all your expenses, you are permitted to draw upon the Accountant-General of the Navy for such sums of money as you may from time to time require for carrying on this service; and in conducting this inquiry you are to govern yourself by the strictest impartiality.

The inclosed instructions will serve to guide you in the general discharge of the inquiry, but you are nevertheless to take advantage of any circumstances which may arise, in further elucidating the subject.

Having completed the object in view you will return to England and make a full report of all the circumstances which have come to your knowledge.

I am, &c.
(Signed) W. BURNETT,
Director-General.

Inclosure 2.

Instructions to Dr. McWilliam.

YOU are to ascertain whether fever was prevalent in Boã Vista or in any of the other islands at the time the "Eclair" arrived there. And if so, how long it had prevailed?

What was its character—Epidemic, endemic, or sporadic?

Whether it had originated in the island, or in any of the other islands, or been imported?

And whether there was any proof of its being of a contagious nature, or data to lead to a contrary conclusion?

You are to obtain, if possible, a correct list of the names of all the strangers or islanders who visited or were employed on board the "Eclair" while she remained at Boã Vista; and a similar list of the soldiers, islanders, or other individuals, strangers, who were stationed in the Fort on the small island, or visited the island, during the time the crew and sick of the "Eclair" were disembarked there; and to ascertain if any of either of those parties have since been affected with fever similar to that of the "Eclair;" and if so to obtain—

A list of their names,
Date of attack, and the
Result of the Disease;

And to state whether it appears the disease was contracted from exposure to some morbid agent of a miasmatic nature, generated or existing within the vessel, or from exposure to a specific contagion emanating from the bodies of the sick?

The latter query applies particularly to the soldiers stationed as a guard in the Fort?

You are also to ascertain whether there is any direct proof of the disease having been communicated by those individuals to a second party, and from that to a third party, and so on; and if any of them have died in the Fort, you are to make particular inquiry if they were ever on board the "Eclair?"

And whether it appears that the fever was communicated to any individual in the house where the officers and their servants resided, or to any person in its immediate vicinity?

Also, whether any of the women who washed the officers' clothes contracted fever; and were they Africans or islanders? black or coloured?

Whether there is any proof of the disease breaking out on other parts of the island where, from the distance from the town and anchorage, or other circumstances, the inhabitants could have had no communication either direct or indirect with the "Eclair?"

Whether the disease has spread to any of the other neighbouring islands; and by what means?

And further, whether there are any circumstances from which it may be inferred that the fever lately prevalent at Boã Vista was an indigenous production, or that it originated in causes unconnected with the "Eclair?"

In pursuing this inquiry you are also to pay particular attention to the directions contained in my letter of this date, and in all cases you are to state the sources from whence you obtained the information.

Dated this 31st day of January, 1846.

(Signed)

W. BURNETT,
Director-General.

Inclosure 3.

*Don Jose Miguel de Noronha, Governor-General of the Cape de Verd Islands,
to the Portuguese Consul-General at Gibraltar.*

(Extract.)

Island of Brava, January 27, 1846.

THE recollection of the circumstances referred to did not fail to fill my heart with sadness, on account of the premature death of the worthy and indefatigable Commander Estcourt, other officers, and many of the crew of the "Eclair," as well as of the breaking out of the terrible disease in the Island of Boã Vista, which attacked and cruelly decimated its unfortunate inhabitants, natives as well as strangers.

The then resident members of the Government considered it necessary, in order to avoid their becoming victims of the scourge, to retire hastily from the place to the Island of Brava.

It is true that the disease, which was perfectly endemic—for not one of those who emigrated to the different islands of the archipelago had the disease, or communicated it to others—did not make its appearance till a month after the departure of the steamer; but as Boã Vista was permitting the landing of the sick from the "Eclair" on a small island at a mile distance from the port of Sal Rey, where the pestilence broke out, it was natural enough that the public should attribute to my condescension the evils which took place, and I consequently look forward to bitter censures and severe animadversions.

I feel, nevertheless, that I have complied with a sacred and binding duty of philanthropy, and that the disease had its origin in the great falls of rain which took place at a very advanced period of the season, and which remained stagnant in the neighbourhood of the place, as happens every year in Villa da Praya*; I therefore calmly wait the result.

Inclosure 4.

Mr. Macaulay to the Earl of Aberdeen.

(Extract.)

December 24, 1845.

THIS brings me to observe upon the mode in which it is generally believed the "Eclair" fever was communicated to Boã Vista. When the Fort, which had been used as an hospital by the "Eclair's" crew, was re-occupied by the small military guard who usually do duty there, two of the soldiers were seized with fever, and were immediately removed into

* The capital of St. Jago, the principal island of the Cape de Verd group.

the crowded town of Porto Sal Rey. The first serious case of fever which subsequently attracted observation, occurred at the house in which one of these sick soldiers had lodged; but so long an interval had elapsed between the departure of the "Eclair" and the appearance of this case of fever in the town, that we were all disposed in the first instance to attribute it, as well as the general sickliness of the place, rather to stagnant water which had settled in great quantity at the back of the town, joined with the great heat of the weather and the dirty state of the streets.

Without a better acquaintance with the facts of the case than I possess, I am unwilling to pronounce an opinion how far the general Government of the province, or the Municipal Chamber of Boã Vista, or the Military Commandant of the island, may justly be charged with a want of proper prudence and caution in their proceedings subsequently to the departure of the "Eclair;" but it is a satisfaction to know that the "Eclair" had left Boã Vista nearly a month before any case of "Eclair" fever exhibited itself in the town. This circumstance, coupled with the fact that no injury whatever had resulted from the unrestricted intercourse which had subsisted during the whole of the "Eclair's" stay in the harbour, between the officers and men (not in hospital at the Fort) and their friends on shore, proves, I think clearly, that had the building which was so long used as a fever-hospital, been properly fumigated and purified prior to its re-occupation, and had the two soldiers who were there seized with fever been kept (like the fever patients of the "Eclair,") from all intercourse with the densely-peopled and closely-built town, no bad consequences would have been experienced at Boã Vista from the visit of the "Eclair," and the kindness and hospitality which were there extended to her. This neglect, however, it may be urged on the other hand, is attributable in a great degree, if not entirely, to the false estimate which was formed by all the medical men, of the dangerous and malignant character of the disease which had prevailed on board the "Eclair."

Inclosure 5.

Consul Rendall to the Earl of Aberdeen.

(Extract.)

December 22, 1845.

UP to the 9th of October, extraordinary heat, and the fall of a large quantity of rain, had been experienced—events which were surprising to the oldest inhabitant. The fever then began to show itself; and the first fatal case in the town is said to have taken place in the house where the two coloured soldiers from the Fort had been brought and recovered from their sickness. Each succeeding day, to the end of the month, gave two, and sometimes three cases daily, all occurring within the immediate neighbourhood of the house where the first death took place. A Portuguese surgeon had been brought from Porto Praya, who, with the Portuguese practitioner in the town, maintained that the fever arose from the presence of the stagnant water; and they so held the same opinion until the 20th of November, when they openly declared it to be a fever of the worst description, and of a most contagious nature. From this date clean bills of health to vessels were refused; and all vessels leaving the port for any of the neighbouring islands were subjected, upon their arrival, to be placed in quarantine for thirty days.

Up to the first week in December the fever continued to rage, and at that period it had found its way into almost all the country villages, the deaths averaging seven and eight daily. The last report I have received from Boã Vista is to the 21st instant, to which date 250 had died; but it is stated that for fourteen days previous there had been no deaths in the port and in three of the country villages, although the fever still existed in two of them.

Inclosure 6.

Dr. McWilliam to Sir William Burnett.

Sir,

Southsea, Hampshire, September 17, 1846.

I HAVE the honour to transmit you the inclosed report on the origin and progress of a fever which prevailed at the Island of Boã Vista, in the Cape de Verds, during part of the last and present years.

The investigation into the nature and history of the disease was made in accordance with instructions received from you in the month of February last; and in conducting it I endeavoured honestly to fulfil the important duty confided to me.

The report consists of five parts.

The 1st part contains a nominal list of all the Europeans who were on the Island of Boã Vista when Her Majesty's ship "Eclair" arrived there; of those who remained and escaped; and of those who were attacked, with the result. Evidence relative to the arrival of Her Majesty's ship "Eclair" at Boã Vista; to the women who washed the clothes from the "Eclair," and the examination of the survivors; to the landing of the crew at the Fort upon the small island; the progress of the fever on the small island; its partial appearance in Porto Sal Rey; its breaking out among the guard at the Fort, and afterwards in various parts of the Island of Boã Vista.

The 2nd part contains nominal lists, with the examination of the surviving labourers who were on board the "Eclair."

The 3rd part contains a nominal list of the labourers belonging to Boã Vista, who were employed in the launches, coaling and watering Her Majesty's ship "Eclair," with the examination of the survivors.

In the 4th part are lists of labourers from various parts of the Island of Boã Vista, who were employed at the coal-heap on the small island in the service of Her Majesty's ship "Eclair," with the evidence of the survivors, and that of Dr. Almeida.

Part 5 contains a brief historical summary of the facts that were elicited by personal interrogation of every man on the island who had been in any way connected with the "Eclair," and of several other persons who possessed information on the subject of the fever, with such remarks as were suggested, after an impartial and careful consideration of all the circumstances that came under my notice.

I would only observe, that whatever view may be taken as to the correctness of the conclusions at which I have arrived, the facts contained in the examinations are set down word for word, as nearly as possible without rendering them unintelligible. The truth of the statements may be relied upon, however erroneous may be the deductions that have been drawn from them.

I am in the daily expectation of some other documents connected with the state of health on the other islands of the archipelago, which did not reach me, owing to the interruption of intercourse between them and Boã Vista, from the rigorous quarantine which had been, and still continued (when I left on July 15) to be imposed on that island. These shall be duly forwarded on their arrival. The same cause prevented my leaving Boã Vista after the investigation was terminated, and will I trust account for the long period during which this report has been withheld.

I have, &c.,

(Signed) J. O. McWILLIAM, M.D.,
Surgeon, R.N.

In submitting this Report to your inspection, I would with great deference trust that it will in some degree meet with your approbation; and hope that in consideration of my services in the Niger and in other parts of the world, added to my recent employment in the Cape de Verds, you will be pleased to recommend me to my Lords Commissioners of the Admiralty as deserving of promotion.

(Signed) J. O. McWILLIAM,
Surgeon.

REPORT.

PART I.

Contents.

| No. | | Page |
|-----|--|------|
| 1. | Number of Europeans who were in the Island of Boã Vista when Her Majesty's ship "Eclair" arrived there in August 1845 | 8 |
| 2. | List of the Portuguese who left the island; of those who remained; of those who were attacked with fever; and of those who died | 9 |
| 3. | List of the English, American, French, and Spanish residents who left the island; of those who remained, of those who were attacked with fever; and of those who died | 11 |
| 4. | Evidence relative to the arrival of Her Majesty's ship "Eclair" at Boã Vista, and to the native women who were employed to wash the soiled linen belonging to the officers of that vessel | 13 |
| 5. | Return of the military guard at the Fort Duke of Braganza, on the small island at the entrance of the harbour, during and after its occupation by the crew of Her Majesty's ship "Eclair" | 19 |
| 6A. | Evidence relative to the visitors of Miguel Barbosa and Pedro Manoel, negro private soldiers, while lodged in the house at Pao de Varella, after their return from duty at the Fort | 26 |
| 6B. | Evidence of Justinian da Silva Georgio, spirit-storekeeper in Porto Sal Rey, whose house was resorted to by the petty officers, &c., of Her Majesty's ship "Eclair," when on leave shortly after the vessel arrived at Boã Vista | 30 |
| 7. | Evidence of Senhor Ignacio Carvahal, merchant in Porto Sal Rey, relative to the origin and progress of the fever there | 31 |
| 8. | Evidence of Senhor João Baptista, proprietor of salt-works, &c. in Boã Vista, relative to the fever in Porto Sal Rey, Boaventura, &c. | 32 |
| 9. | Evidence of Vicente Antonio Oliveira, carpenter, relative to the fever in Boaventura and in the eastern villages | 33 |
| 10. | Evidence of Lieutenant Joaquim José dos Santos, of the artillery battalion of the Cape de Verds, relative to the fever in various parts of the Island of Boã Vista | 34 |
| 11. | Evidence of João Baptista, relative the appearance of fever in João Gallego, and showing the effect of removing from a locality where fever was raging | 35 |
| 12. | Evidence of Antonia Fidela, relative to the fever in João Gallego, &c. | 36 |
| 13. | Evidence of Gustavus Fortes Varella, relative to the appearance of fever at Moradinha | 36 |

1.—Europeans who were on the Island of Boã Vista, in the Cape de Verd Group, in September 1845.

| | |
|------------------------------------|-----------|
| Portuguese* | 56 |
| English | 23 |
| Americans | 2 |
| French | 2 |
| Spaniards | 3 |
| Total number of Europeans . | 86 |

* The Governor-General and his suite of nearly sixty Europeans, are not included, as they were merely visitors, and left the island.

† Lieutenant Santos and his family, consisting of three persons, did not arrive in Boã Vista from Sal until November 1845. Two others came from Lisbon in October: one, a convict, survives, but the other, a soldier, died two months after his arrival.

2.—List of the Portuguese Residents at Boã Vista, in the Cape de Verds,
in September 1845.

| Names. | Rank. | If attacked with Fever, and when. | Result. | Remarks. |
|--------------------------------|----------------------|---|-----------|--|
| Hypolito José Xavier d'Almeida | Licenciado | Not attacked | | |
| Lorenzo José Viereia .. | Capt. Port | Ditto | | |
| Antonio Aug. J. Thurion | Collector Customs | Ditto | .. | Left island in November |
| Antonio de Sousa .. | Merchant | Ditto | .. | Ditto |
| Joaquim P. de Silva .. | Lieutenant | Ditto | .. | Ditto |
| Major Mascarenhas .. | Military Commandant. | In Dec. 1845 | Recovered | Remained on island |
| Joaquim José dos Santos.. | Lieut. Artillery | Feb. 1846 | Do. | Ditto. Arrived from Sal in November 1845 |
| Joao Roberto dos Santos.. | Son of Lieut. Santos | March | Do. | Ditto |
| Antonio Pereira Alio .. | Custom-House Officer | Not attacked | .. | Remained on island |
| Francisco Cosmo Nunes.. | Writer | Jan. 1846 | Recovered | Ditto |
| Antonio Joaquim de Lima | Storekeeper | Nov. 1845 | Do. | Ditto |
| Manoel Phedem | Servant | Dec. 1845 | Do. | Ditto |
| Antonio de Bilhar .. | Billiard marker | Nov. 1845 | Do. | Ditto |
| José Francisco | Storekeeper | Nov. 1845 | Do. | Ditto |
| José Lopes | Shoemaker | Nov. 1845 | Do. | Ditto |
| José Pinto Santos .. | Storekeeper | Dec. 1845 | Do. | Ditto |
| Antonio Francisco Ferreira | Shoemaker | Dec. 1845 | Do. | Ditto |
| Daniel Gesente | Ditto | Dec. 1845 | Do. | Ditto |
| Alexandre A. Roderigues | Baker | Dec. 1845 | Do. | Ditto |
| Miguel da Cunha .. | Clerk | Jan. 1846 | Do. | Ditto |
| Joao F. Pinta Goira .. | Convict | Not attacked | .. | Ditto |
| Manoel Sardinia | Farmer | Ditto | .. | Ditto |
| José Pedro Poste.. .. | Labourer | Dec. 1845 | Recovered | Ditto |
| José | Tailor | Not attacked | .. | Ditto |
| José Carlos Lisboa .. | Writer | Oct. 1845 | Died | Lived next to Anna Gallinha |
| Antonio Creado | Merchant's servant | Nov. 1845 | Do. | Visited Lisboa. |
| Joao Espindola | Convict | Nov. 1845 | Dc. | Came from Portugal in October 1845 |
| Antonio Carpenteiro .. | Carpenter | Nov. 1845 | Do. | Remained on island |
| Joaquim Ferreiro. . . | Sailor | Jan. 1846 | Do. | Came from a vessel in harbour |

| Names. | Rank. | If attacked with Fever, and when. | Result. | Remarks. |
|-------------------------------|-----------------------------|-----------------------------------|-----------|---|
| Antonio Grannadeiro .. | Convict | Nov. 1845 | Died | 20 years on island. |
| Rufino dos Santos .. | Ditto | Nov. 1845 | Do. | 4 years on island |
| José de Amorion Almeida | Ditto | Nov. 1845 | Do. | 8 years on ditto |
| Francisco da Freitas .. | Labourer | Dec. 1845 | Do. | 24 years on ditto |
| Padre Ignocenció. . | Priest, Rabil | Nov. 1845 | Do. | 13 years on ditto |
| Padre Francisco .. | Priest, North Side villages | Jan. 1846 | Do. | 13 years on ditto |
| Leiria Antonio Santos .. | Convict | Jan. 1846 | Do. | 8 years on ditto |
| Luis Barros | Carpenter | Nov. 1845 | Do. | |
| FEMALES. | | | | |
| Donna Maria dos Santos. . | Lady of Lieut. Santos | March 1846 | Recovered | Arrived from Sal in November 1845 |
| Donna Maria J. dos Santos | Daughter of Ditto | March 1846 | Do. | Ditto |
| Maria Victoria | Convict | Nov. 1845 | Do. | 3 years from Portugal |
| Rita Escama | Tailoress | Dec. 1845 | Do. | 24 years ditto |
| Maria Rufina | Storekeeper | Dec. 1845 | Do. | 8 years ditto |
| Maria | Housekeeper | Dec. 1845 | Do. | 3 years ditto |
| Joaquina Mascarenhas .. | Ditto | Nov. 1845 | Died | 30 years from Lisbon |
| Antonia Rita da Freitas .. | Tailoress | Nov. 1845 | Do. | 24 years ditto |
| Maria Bernarda | Tailor's wife | Dec. 1845 | Do. | 2 years ditto |
| Anna Gallinha | Tailoress | Oct. 1845 | Do. | 10 years ditto |
| SOLDIERS IN BARRACKS. | | | | |
| Joao Alexandre Roque .. | Private | Sep. 20, 1845 | Do. | At the Fort, from Lisbon, August 1844 |
| Joaquim Agostinho .. | Corporal | Sep. 21, 1845 | Do. | Ditto |
| Luis Francisco Pimentel. . | Private | Nov. 6, 1845 | Do. | In barracks, Porto Sal Rey; six years on island |
| Jose Maria Maraes e de Castro | 1st Serjeant | Nov. 8, 1845 | Do. | In barracks; two years on island |
| Francisco da Cunha .. | Private | Nov. 8, 1845 | Do. | Uncertain how long |
| Manoel Jose Alves Guimaraes | Prisoner | Nov. 17, 1845 | Do. | 5 years at St. Jago |
| Luis Briza | Private | Nov. 12, 1845 | Do. | 1 year from Lisbon |
| Francisco Antonio .. | 2nd Serjeant | Nov. 26, 1845 | Do. | Two months only from Lisbon |
| Alexandre Antonio .. | Private | Nov. 1845 | Recovered | |

3.—LIST of the English Residents at Boã Vista, Cape de Verds, in September 1845.

| Names. | Rank. | If attacked with Fever, and when. | Result. | Remarks. |
|-------------------------------------|-------------------------|-----------------------------------|--|---|
| Henry William Macaulay | Commissioner Judge | Not attacked | .. | Left for San Nicolao, October 22, 1845. |
| Hon. Mrs. Macaulay .. | .. | Ditto | .. | Ditto |
| Master H. Macaulay .. | .. | Ditto | .. | Ditto |
| T. Macaulay (infant) .. | .. | Ditto | .. | Ditto |
| Elizabeth Hodgson .. | Servant to Mr. Macaulay | Ditto | .. | Ditto |
| Helen ——— .. | Ditto | Nov. | .. | Returned to Boã Vista, remained until the 18th Jan. |
| John Dachin .. | Ditto | Nov. 1845 | Died | Ditto |
| Charles Pettingal .. | Arbitrator Mixed Com. | Nov. 1845 | Do. Dec. 5, in quarantine at St. Nicolao | Left Boã Vista on 22nd Oct., and returned 11th Nov. |
| Mrs. Pettingal .. | .. | Not attacked | .. | Ditto |
| Miss Pettingal .. | .. | Nov. 1845 | Died Nov. 24, at Boa Vista | Ditto |
| John Rendall .. | Consul | Not attacked | .. | Left for San Antonio Dec 1, 1845 |
| Mrs. Rendall .. | .. | Ditto | .. | Ditto |
| George Rendall .. | Merchant | Ditto | .. | Ditto |
| John Rendall .. | Vice-Consul, St. Jago | Ditto | .. | Left the island March 1845. |
| John Jamieson .. | Consul's store-keeper | Ditto | .. | Remained on the island. |
| Anne ——— .. | Consul's servant | Ditto | .. | Left December 1, 1845. |
| Children (two) .. | .. | . | .. | Ditto |
| Mrs. Learner .. | .. | Nov. 1845 | Died Nov. 27 | Remained on island. |
| Peter Kenny .. | Surgeon | Nov. 1845 | Died Nov. 27 | |
| John Knevett .. | Clerk | Not attacked | .. | Left island Dec. 1, 1845 |
| George Tait .. | Ditto | Ditto | .. | Ditto March 1846. |
| ——— Barkley, Commissary from Gambia | Commissariat Department | Ditto | .. | Ditto December 1, 1845. |

| Names. | Rank. | If attacked with Fever and when. | Result. | Remarks. |
|---------------------------|------------------------|----------------------------------|-----------|--|
| AMERICANS. | | | | |
| — Plasket | Captain, merchant ship | Dec. 1845 | Died | |
| A sailor (name unknown) | .. | Dec. 1845 | Do. | |
| FRENCHMEN. | | | | |
| Adolphe Benjn. Thinel .. | Storekeeper | Nov. 1845 | Recovered | Five years on island. |
| Bernard Philippe Montiero | Ditto | Ditto | Do. | Nineteen years ditto. |
| SPANIARDS. | | | | |
| Andrea Gannia | Carpenter | Not attacked | .. | Had fever in Havana, with black vomit. |
| José Pedro Pons | Cigar-maker | Ditto | .. | Ditto |
| Don Pedro M. Pito .. | Captain, merchant-ship | Ditto | .. | Ditto |

SUMMARY.

| | | | | Total on Island. | Attacked with Fever. | Recovered. | Died. | Not attacked. |
|--------------------------|------|----|----|------------------|----------------------|------------|-------|---------------|
| Portuguese.—Total No. 56 | | | | | | | | |
| Left island, males 3 | | | | | | | | |
| Remained, males | .. | .. | .. | 43 | 37 | 16 | 21 | 6 |
| „ females | .. | .. | .. | 10 | 10 | 6 | 4 | .. |
| English.—Total No. 23. | | | | | | | | |
| Left island, males 8 | | | | | | | | |
| „ females | 6—14 | | | | | | | |
| Remained, males | .. | .. | .. | 5 | 3 | .. | 3 | 2 |
| „ females | .. | .. | .. | 4 | 3 | 1 | 2 | 1 |
| American | .. | .. | .. | 2 | 2 | .. | 2 | .. |
| French | .. | .. | .. | 2 | 2 | 2 | .. | .. |
| Spaniards | .. | .. | .. | 3 | .. | .. | .. | 3 |
| Grand Total | .. | .. | .. | 69 | 47 | 25 | 32 | 12* |

* Among those who escaped, the Surgeon of the Governor-General deserves to be particularly noticed, for he saw a great many sick. Messrs. Moraes and Leao, who came from Lisbon in February 1846, were both attacked, but they recovered.

- 4.—*Evidence relative to the arrival of Her Majesty's ship "Eclair" at Boã Vista; and to the native women who were employed to wash the soiled linen belonging to the officers of that vessel.*

*Porto Sal Rey, Island of Boã Vista,
in the Cape de Verd Group, April, 1846.*

AT the house of Henry William Macaulay, Esq., Her Majesty's Commissioner, &c., of the Mixed Commission Court, Boã Vista.

John Jamieson, a native of London, store-keeper of John Rendall Esq., Her Britannic Majesty's Consul at Boã Vista, called in and examined.

1. How long have you been on this island?—Upwards of six years.
2. Has the island been in general healthy during that period?—Always remarkably healthy, until after the departure of Her Majesty's ship "Eclair" in the month of September last.

3. Do you recollect at what time the "Eclair" arrived here?—Yes, perfectly. It was on or about the 21st of August last.

4. Did you go on board of the "Eclair"?—Yes, immediately on her arrival the Consul desired me to go on board; on getting alongside, Captain Estcourt told me there was fever on board, and that he was on that account doubtful whether the authorities here would not put the vessel in quarantine. Upon this I returned to the shore, and stated to the Consul what Captain Estcourt had said. Whereupon the Consul went with Dr. Kenny (the only regular practitioner on the island) to Don José de Norronha, Governor-General, at that time residing here. On the Consul's return from the Governor-General he ordered me to accompany Dr. Kenny to the "Eclair," and we were at once admitted on board. Captain Estcourt made some inquiries of me about water and refreshments for the crew, and said he intended to remain a month or so at the island for the benefit of the crew, many of whom were ill with fever. Dr. Kenny went below and looked at the sick, in company with the surgeon of the ship; on his return to the deck, he said, "It is only the common coast fever." The doctor and I then went on shore. Shortly afterwards, Captain Estcourt and the First Engineer came on shore in a gig manned by six Kroomen. Captain Estcourt went first to the Consul's and afterwards to Mr. Macaulay's. The Kroomen remained about the pier until the captain returned to his ship in the evening. The engineer after only a short stay on shore also went off to the ship.

5. Did you visit the ship soon afterwards?—Yes, I went on board the same night with the engineer, and remained there till half-past 10, when I returned to the shore. The boat that brought me on shore contained at least a dozen bags of soiled linen belonging to the officers of the ship; not knowing what to do with the linen, I took it to one of the Consul's store-rooms and deposited it there for the night. On the following morning, at the desire of the Consul, I distributed the linen to the washerwomen of the town.

6. Do you know the names of the washerwomen to whom the clothes were given to be washed?—Yes, I can give the names of all of them.

Emilia Joana Mariana,
Maria de Anna Limoa,
Anna Maria da Rocha,
Libania Roderigues,
Maria da Rocha,
Anna Santa Anna,
Maria Leonora,
Joana Maria da Graça,
Sabina Diego,

Delphina Barbara,
Antonia Chileco,
Antonia Romess,
Margarita de Lima,
Anna Margarita,
Justinia Britho,
Maria Rosa,
Aniceta Ferreira,

7. Can you bring the above-named washerwomen here?—Yes, with the exception of the last-named four, who are dead.

Emilia Joana Mariana, mulatto, native of Boã Vista, aged 40, examined.
(Porto Sal Rey.)

8. When did you receive the soiled linen from the "Eclair?"—The day after she came in.

9. When did you return the linen, and to whom did you return it?—In three days after I got it: to Maria Diana Limao.

10. Have you had the fever?—Yes, but not until late in December last.

11. What family have you?—I had two boys and two girls, but I lost one girl.

12. When did she die?—A short time before Dr. Kenny died.

13. Who was first taken ill in your house?—My husband was first taken ill.

14. Had he been to see any sick people?—Yes, a great many. He is a country doctor, and cupped numbers who had the fever.

15. Did your daughter attend your husband during his illness?—No; she went to Cabeçada to see her grandmother, who was then ill and afterwards died.

16. Was there fever in Porto Sal Rey before your daughter went to Cabeçada to see her grandmother?—Yes, and my husband was just taken ill.

17. Did your daughter die at Cabeçada?—Yes; she died after four days' illness: she had black vomit.

18. How long was your husband ill?—He was several days with high fever, and a long time weak.

19. Were you attacked when your husband was ill?—No, when he was getting better.

20. How long were you ill?—I had fever only four days; but I had a severe diarrhœa seven or eight days.

21. Were you ever away from the island?—No.

22. Your health has in general been good?—Yes.

Maria de Anna Limoa, mulatto, native of Boã Vista, aged 50, examined.

23. Did you receive foul linen from the "Eclair" to be washed?—Yes, I received linen from the captain and several of the officers.

24. Who gave it to you?—John Jamieson.

25. When did you return the linen?—In three days after I got it; I returned the whole clean to the captain's steward at Mr. Macaulay's house.

26. Have you had the fever?—Yes, I have; but not until late in January last.

27. What family have you?—Two sons, a niece, and a nephew.

28. Were they taken ill?—Yes, all of them.

29. Who was first attacked?—Cundia, my niece.

30. When was she taken ill?—Not until January last.

31. Did she assist in washing the clothes?—Yes.

32. Had any or all of you been in houses where there were sick people?—Yes, all of us.

33. Who was next attacked?—My son; then the nephew.

34. You all recovered?—Yes, all of us.

35. Have you ever been away from the island?—Yes, I have been in America, Lisbon, Greece, St. Jago, and others of the Cape de Verds.

36. Had you ever fever before?—No; but I had small-pox at Porto Praya in St. Jago.

Anna Maria da Rocha, mulatto, native of Boã Vista, aged 19, examined.
(Porto Sal Rey.)

37. You received some foul linen from the "Eclair?"—Yes, I received some to wash the day after the ship came in.

38. To whom did you return it?—To Maria Diana Limoa.

39. Do you usually reside at Porto Sal Rey?—No, I reside at Fundo das Figueiras, one of the villages on the north side of the island.

40. Then were you sick at Porto Sal Rey, or at Fundo das Figueiras?—I was taken ill at Fundo das Figueiras.

41. Who was ill at Fundo das Figueiras when you went there?—The son of José Anterao da Cruz.

42. Did you see him?—No.

43. Did you live near him?—No.

44. Had you been in any houses at Porto Sal Rey where there were sick?—Yes, I saw Emilia Joana Mariana when she was sick.

45. How long were you ill?—Four days only.

46. How many are there in your house?—My father, sister, and myself.

47. Were they all attacked?—Yes, after I was.

48. Had your father and sister seen any sick people?—No, none besides myself.

49. How long was your father ill?—He was very ill indeed, nearly a month confined to the house.

50. And your sister?—She was only four days ill.

51. Did she recover?—Yes.

52. Were you much visited when you were laid up?—Not much, only by a few.

Libania Roderigues, a negress, native of Boã Vista, aged 17, examined.
(Porto Sal Rey.)

53. You received some foul linen from the "Eclair" to be washed?—Yes, I did.

54. Do you know whose linen you got to wash?—No, I do not; it belonged to one or more of the officers.

55. To whom did you return it?—To Maria Diana Limoa.

56. Have you had the fever which has been prevailing in this island?—Yes, but not until January last; I was then at Boaventura.

57. Had you been much among the sick before you were attacked?—No, I had not seen any sick person except my mother.

58. Where was your mother taken ill?—At Boaventura, Rabil.

59. Do you live at Rabil?—No, we went there from Porto Sal Rey, thinking to avoid the fever.

60. Do you know if your mother visited any sick people?—I am not sure.

61. How long was your mother ill?—She was only four days in fever.

62. How many are there in your house?—My father and mother, and six children.

63. Who was first taken ill?—My mother first, then my father; then two brothers, on the same day, and the rest, with myself, soon afterwards.

64. Did you all recover?—Yes.

65. Has your family in general enjoyed good health?—Yes, always, until we had the late attack of fever.

Maria da Rocha, dark mulatto, native of Boã Vista, aged 22, examined.
(Porto Sal Rey.)

66. Did you receive soiled linen from the "Eclair," to be washed?—Yes, I did, soon after the vessel arrived here.

67. Have you been at all ill during or since the "Eclair" was here?—I was sick, but not until very lately.

68. Have you a family?—Yes, I have a husband and two children.

69. Who was first taken ill in the house?—Myself; then my husband, and next one of the two children.

70. Had you been among sick people?—No.

71. Had your husband.—Yes. He had been in almost every sick house in Porto Sal Rey.

Anna Santa Anna, a negress, native of Boã Vista, aged 60, examined.
(Porto Sal Rey.)

72. I believe you had some soiled linen from the "Eclair" to wash?—Yes, I had.

73. With whom do you live?—I am a slave, and live with my master, who was called "Clophina." When the sickness appeared in Porto Sal Rey, he went to Rabil, and took me with him; when the fever was on the decrease, he returned for some time to the port. After this he went to João Gallego, one of the northern villages.

74. Did you accompany your master to João Gallego?—No.

75. Have you had fever?—No.

76. How many were there in your master's house?—In all, fourteen persons.

77. How many of these were attacked besides your master?—Only his daughter and a slave who accompanied him to João Gallego.

79. Did they recover?—Yes.

80. Did all go to Rabil?—Yes.

81. Then am I to understand that those who went to Rabil (Boaventura), and returned to Porto Sal Rey and stopped there, escaped being attacked; while your master and his daughter and the slave who went to João Gallego, all had fever?—Yes.

82. Did they all recover?—No. My master died after a few days' illness; his daughter and the slave recovered.

Maria Leonora, negress, a native of Boã Vista, aged 26, examined. (Porto Sal Rey.)

83. You had some clothes to wash from the "Eclair"—Yes, I had.

84. When were you taken ill?—Some time about the 20th of October last.

85. Where do you live?—At Pao de Varella, Porto Sal Rey.

86. Had you been to see any sick persons?—Yes. Antonio Jules, Manoel Affonso, and Antonio Perica.

87. How long were you ill?—About a fortnight.

88. How many are there in the house you live in?—My mother and two sisters.

89. Were they attacked?—Yes; all in one day, soon after I was attacked.

90. Had they been among sick people?—Yes, they had been to see Manoel Affonso; our house is near to that in which he died.

91. Did you all recover?—Yes.

92. Have you and your family in general had good health?—Yes, always until lately.

Joana Maria da Graça, mulatto, native of Boã Vista, aged 19, examined.
(Porto Sal Rey.)

93. You washed some foul linen belonging to the officers of the "Eclair?"—Yes, I did.

94. Where do you live?—In Pao de Varella.

95. Have you had fever?—Yes.

96. When had you the fever?—I do not know the time, but it was after Manoel Affonso, Anna Gallinha, and many others were dead.

97. Had you seen many sick before you were attacked?—Yes, many.

98. How long were you ill?—Twice; the first time five days, and the other time a week.

99. How many are there in the house you live in?—My mother, two sisters, and myself.

100. Who was first taken ill?—Myself, then my mother, and next my sister.

101. Did you all recover?—No; my mother died.

102. How long was she ill?—A week.

103. Had your mother seen many sick?—Yes, she had seen several; and attended upon Mrs. Learner when she died.

Sabina Diego, dark mulatto, native of Boã Vista, aged 45, examined.
(Porto Sal Rey.)

104. You washed some soiled linen belonging to the "Eclair?"—Yes.

105. Have you had fever?—Yes.

106. What family have you?—A husband and one daughter.

107. Were they attacked?—Yes; when the fever was general in the town.

108. Who was first attacked?—My husband first, then myself, and next the daughter.

109. Did you all recover?—Yes.

110. Had you all been among sick people?—Yes, all of us.

Delphina Barbara, a negress, native of Boã Vista, aged 46, examined.

111. You washed soiled linen for the officers of the "Eclair?"—Yes, I did.

112. Have you had fever during or after the "Eclair" was here?—No.

113. How many children have you?—Two.

114. Have they had fever?—Yes.

115. Were they among the sick?—Yes, a soldier called Luis Antonio was ill with fever in my house.

116. Did your children recover?—Yes.

Antonia Chileco, mulatto, native of Boã Vista, aged 30, examined.
(Porto Sal Rey.)

117. You washed soiled linen for the "Eclair?"—Yes, I did.

118. Where do you live?—In Pao de Varella.

119. How many are there in the house you live in?—My mother and seven children.

120. Have you all had fever?—Yes. One of my brothers was first taken ill during the sickness of Manoel Affonso, where he had visited; the rest of the family were taken ill, all about the same time. The brother who was first taken ill is called Leandro Evera; he was in the boat that

took Manoel Antonio Alves, the soldier that buried the two Portuguese soldiers who died at the Fort.

121. Did you all recover?—Yes.

122. Were you visited by others when you were sick?—Yes, by a great many.

123. Do you know of any of your visitors being attacked with fever?—Yes; Luisa Chileco and all her family were taken ill shortly after we were.

124. Have you and your family in general enjoyed good health?—Yes, always, until we had the late fever.

Antonia Romess, negress, native of Boã Vista, aged 26, examined.

125. You washed clothes for the officers of the “Eclair?”—Yes, I did.

126. What family have you?—A mother, and six brothers and sisters.

127. Have any of you been sick?—Yes; all of us have had the fever.

128. Who was first attacked?—My brother. He died.

129. When was he taken ill?—Some time in November.

130. How long was he ill?—Only four days.

131. Had he been among sick people?—Yes, but he was taken ill after he had been carrying some dead bodies to be buried.

132. Who was next taken ill?—A sister; and about the same time all the others in the house.

133. Did all the rest recover?—Yes, all, except my brother.

Margarita de Lima, a mulatto, native of Boã Vista, aged 22, examined.

134. Were you employed washing clothes for the officers of the “Eclair?”—No; I ironed a great part of the clothing.

135. Have you had fever?—Yes; but I was not attacked until January.

136. How many are there in your house?—Fourteen in all.

137. Had you all the fever?—Yes, in a mild degree.

138. And all recovered?—Yes.

(Translation.)

Sir,

Military Commandant's Office,

Boã Vista, April 17, 1846.

I HAVE the honour to send you answers to the questions you have put to me.

I am, &c.

(Signed)

JOAO ANTONIO MASCARENHAS,

Major Grad. Commandante Militar.

To J. O. Mc William, M.D.

&c.

&c.

1. What was the military force on the island on the 8th September, 1845?—Forty-one rank and file.

2. What was the number attacked with fever?—The whole.

3. What was the number of deaths?—Eleven.

4. What were the names of those who died; and on what dates did they die?—

Private João Alexandre Roque, September 20, at the Fort.

Corporal Joaquim Agostinho, September 21, at Fort.

Private Luis Francisco Pimentel, November 6, barracks.

Serjeant José Maria de Maraes e Castro, November 8, barracks.

Private Antonio Lopes, November 8, barracks.

Private Francisco da Cunha, November 8, barracks.

Private Luis Briza, November 12, barracks.

Prisoner Jose Manoel Alves Guimaraes, November 17, barracks.

Private Pedro Gonzalves, November 24, barracks.

Serjeant Francisco Antonio Celestino, November 26, barracks.

Private Antonio Joaquim, November 28, barracks.

5. How long had Joaquim, Agostinho, Joao Alexandre Roque, and Luis Briza, been from Portugal?—They came from Portugal by way of Porto Praya, where they were twenty days, or thereabouts, in August 1844.

6. On what duty had these soldiers been employed, before they were sent to the Fort?—The usual duty of the island.

7. How long had the other European soldiers been on the Island of Boã Vista?—

Private Luis Francisco Pimentel, six years.

Serjeant Jose Francisco Maria de Maraes e Castro, two years.

Prisoner Jose Manoel Alves Guimaraes was in Porto Praya five years, and was sent here during the rainy season there.

Private Francisco da Cunha came from San Nicolao on the 4th September, 1845.

Serjeant Francisco Antonio Celestino came from Portugal in September 1845, and died on the 26th November of the same year.

8. Were any of the soldiers ever on board the “Eclair?”—No, they were not.

(Signed) J. A. MASCARENHAS.

5.—*Return of the Military Guard at the Fort Duke of Braganza, during its occupation by the Crew of the “Eclair.”*

Acting Corporal Athanasio Perez,

Private Antonio dos Santos,

„ Pedro Manoel.

Relieved by Corporal Vincente da Cruz Silva,

Private Manoel Antonio Alves,

„ Luis Briza (European).

Relieved by Corporal Joaquim Agostinho (European),

Private João Alexandre Roque ditto,

„ Miguel Barbosa,

„ Pedro Manoel 2do.

(Signed) J. A. MASCARENHAS,

Major and Military Commandant.

Those not marked as Europeans are natives of this or others of the Cape Verd Islands.

First Guard at the Fort.

Athanasio Perez, Acting Corporal, native of this island, aged 21, called in and examined.

139. Were you at the Fort on the small island when the sick of the “Eclair” steam-vessel were brought on shore?—Yes, I was.

140. How long did you remain at the Fort after the sick were landed?—Four or five days.

141. Who were your comrades on guard?—Antonio dos Santos and Pedro Manoel.

142. Did you go among the sick people much?—Yes, we were a good deal among them.

143. Where did you and the rest of the guard sleep while the sick were in Fort?—On the piazza, in front of the room occupied by the sick.

144. Were you quite well all the time you were on this guard?—I felt unwell the day after the sick came on shore, but one of the marines gave me some vinegar, with which I bathed my temples and got some relief. When the guard was relieved I was still rather unwell, but I cleaned my musket and went as sentry at the barracks in Porto Sal Rey; however I soon became very weak, and was relieved.

145. Where were you taken to then?—I was taken to my own house in Porto Sal Rey.

146. How long were you ill?—It was nearly a month before I was able to go out.

147. What did you complain of?—General pains, severe headache, and vomiting.

148. Were you attended by any medical man?—Dr. Almeida saw me only once, when I was convalescent.

149. Who nursed you?—My wife.

150. Did any one else visit you?—Some people came in; not many.

151. Did your wife take sick?—Yes; but not until after the sickness became general in the town.

152. Had you always enjoyed good health until the arrival of the "Eclair"?—Yes, always.

153. Where you ever on board the "Eclair"?—No, never.

154. Are you quite sure you never had fever at St. Jago?—I am quite sure I never had fever anywhere until the arrival of the steamer at this island.

Pedro Manoel, private soldier, negro, native of Boã Vista, aged 22, examined.

155. How long were you at the Fort after the sick of the "Eclair" came there?—I am not quite sure, but I think I was there four days with hem.

156. Did any of the "Eclair" people die while you were there?—Yes, some died every day.

157. Did you and your comrades go among the sick people?—Yes, constantly.

158. Where did you sleep?—On the piazza.

159. Were you at all unwell while at the Fort with the sick crew?—No, not at all.

160. Were you ill afterwards?—Yes, but not until there was a good deal of fever in Porto Sal Rey.

161. Have you in general enjoyed good health?—Yes, always, until lately.

162. Have you ever been at St. Jago?—No, never.

163. Were you ever on board the "Eclair"?—Never.

Antonio dos Santos, private soldier, a dark mulatto, native of San Antonio, aged 25, examined.

164. Were you at the Fort on the small island when the sick landed from the "Eclair" steam-vessel?—Yes, I was.

165. How long were you there after they were there?—I think four days.

166. Were you and your comrades much among the sick?—Yes, always, we saw several die.

167. Were you at all unwell while at the Fort?—No, but I was taken ill three weeks after I came from the Fort to the barracks at Porto Sal Rey.

168. Were you long unwell?—No, I soon recovered.

169. Who was the first soldier you saw ill at the barracks?—Athanasio Perez.

170. Have you ever been at St. Jago?—No.

171. Have you never had fever at San Antonio?—No, never.

172. Have you always had good health?—Always, until the steam-vessel came here.

173. Were you ever on board of the “Eclair?”—No, never.

Second Guard at the Fort.

Vincente da Cruz Silva, corporal, a negro, native of Boã Vista, aged 30, examined.

174. You were, I believe, at the Fort Duke of Braganza, while the crew of the “Eclair” were there?—Yes, I was there with them six or seven days.

175. What guard did you relieve there?—The guard under Acting-Corporal Athanasio Perez.

176. Who were your comrades?—Luis Briza, a Portuguese, and Manoel Antonio Alves, a native.

177. Did any of the English sailors and marines die while you were at the Fort?—Yes, some almost every day.

178. Did you mix freely with the sick?—Yes, we did.

179. Were you or your comrades unwell while at the Fort?—No.

180. Were any of you sick afterwards?—Yes, we were all sick afterwards, and Luis Briza the Portuguese soldier died.

181. When did you become sick?—I am not quite sure when, but there were several sick before I was.

182. Had any one died in Porto Sal Rey before you were laid up?—Yes, a woman had died; her name was Anna Gallinha.

183. When was Luis Briza taken ill?—I am not sure, but I think not until fever had become general in the town.

184. Were you ever on board the “Eclair?”—No, never.

185. Have you always had good health until lately?—Yes, always, until after the “Eclair” left this island.

186. Have you ever been at St. Jago or any of the other islands?—I was four months in the Island of Sal in 1839. I have never been at any of the other islands except Sal.

Manoel Antonio Alves, private soldier, a negro, native of Boã Vista, aged 18, examined.

187. You were, I believe, at the Fort Duke of Braganza, when the sick of the “Eclair” were there?—Yes, I was.

188. Who was there with you?—When I was there as a guard, Corporal Vincente da Cruz Silva.

189. You state that they were with you when you were there as a guard; were you there in any other capacity?—Yes, I was sent there by the Commandant to bury the bodies of the Portuguese soldiers who died there after the “Eclair” had left the island.

190. How long were you at the Fort as a guard?—Four or five days.

191. Were you and your comrades quite well when you were relieved?—Yes, we were all well.

192. You have stated that you were ordered to bury the bodies of the two Portuguese soldiers who died at the Fort after the departure of the “Eclair;” who assisted you in this duty?—Joaquim Farenga and Manoel Luis, private soldiers, accompanied me in the boat from Porto Sal Rey to the island. I took off all my clothes, and left them in the boat with my comrades. I then ran up to the Fort, in a state of nudity, and there saw Pedro Manoel and Miguel Barbosa, private soldiers, on duty at the Fort.

192a. On this occasion did you find both the Portuguese soldiers dead?—No, Corporal Agostinho was dead, and private Joao Alexandre Roque, the other Portuguese, was very nearly dead.

193. Who assisted you to convey the body of the Corporal to the boat?—Pedro Manoel, Miguel Barbosa, and I, rolled the body up in a red quilt. The body looked very bad, and smelt most offensively; we then put two pieces of board under the body, and in this way carried it to the boat.

194. Where did you take the body to?—We took it about a mile and a half to the southward of Porto Sal Rey, and buried it in the sand on the beach.

195. When did Joao Alexandre Roque die?—The day after the corporal.

196. Did you also bury his body?—Yes.

197. Were you on this occasion again assisted by the same comrades you had before?—Yes, I was accompanied by the same soldiers, and Miguel Barbosa and Pedro Manoel assisted me to carry the body to the boat, and we buried it in the same manner as we had done that of the corporal.

198. When you had buried both bodies did you and your comrades return to Porto Sal Rey?—Yes, we did.

199. How long did you remain at this time at Porto Sal Rey?—Only an hour or so; for the Commandant ordered me to go again to the Fort as a guard.

200. On this second occasion on which you were sent as a guard, whom did you relieve?—Miguel Barbosa and Pedro Manoel.

201. Who accompanied you as your comrades in the guard?—Lorenzo Samed and Pedro Gonzalves, both private soldiers.

202. On this occasion where did you sleep?—We slept in the same room which had been occupied by the sick of the “Eclair.”

203. Had this room been in any degree cleansed since the departure of the “Eclair”?—Yes, it was whitewashed, and some gunpowder was exploded in it after the death of Corporal Agostinho and the other Portuguese soldier.

204. How long did you remain with this guard?—Only a day and a half.

205. Were you and your comrades relieved at this time?—No, I was taken sick, and my comrades hoisted a signal to that effect; whereupon the barrack boat was sent from Porto Sal Rey, and took me to the barracks.

206. Where were you lodged in Sal Rey?—In a back room in the barracks.

207. How long did Lorenzo Samed and Pedro Gonzalves remain at the Fort?—I do not know, but they were both taken with fever, and Pedro Gonzalves died.

208. How long were you ill at the barracks?—Only four or five days very ill. I was weak a much longer time.

209. Have you ever been at any of the other islands?—Yes, I was at San Mayo, at San Jago, and at Sal, in the year 1841.

210. Were you sick at either of these islands?—No, never.

211. Has your health been in general good?—Yes.

212. Were you ever on board the “Eclair”?—No.

Third Guard at the Fort.

Miguel Barbosa, private soldier (negro), native of Boã Vista, aged 30.
examined.

213. Were you at the Fort on the small island when the sick of the “Eclair” were there?—Yes, I was.

214. How long were you there before the “Eclair” people left the island?—I am not quite sure, but I think about six or seven days.

215. Did many of the “Eclair” people die while you were there?—Yes, a good many. I recollect that five died in one day.

216. How long did you remain at the Fort after the “Eclair” left Boã Vista?—Several days.

217. Some of you were taken ill on this guard—who was first attacked?—Corporal Joaquim Agostinho.

218. How long after the “Eclair” sailed was it that he was attacked?—The day after the steam-vessel sailed from Boã Vista.

219. When was João Alexandre Roque attacked?—On the same day as the corporal.

220. How long were they ill?—The corporal died on the third day, and Roque on the fourth day from being attacked.

221. What did they complain of?—First, general fever; then delirium; afterwards constant black vomiting.

222. Did you assist in carrying their bodies to the boat for the purpose of burial?—Yes, I did. I assisted Manoel Antonio Alves.

223. What room in the Fort did you and the Portuguese soldiers occupy when you first went there?—We occupied the cook-house underneath the piazza; but we occasionally went into the room that had been used by the sick of the “Eclair.”

224. You mean after the “Eclair’s” people left?—Yes; before and after.

225. Was this room cleansed in any way immediately after the “Eclair’s” people left it?—The same day the “Eclair’s” people left the island, I was ordered by Corporal Agostinho to sweep it out, which I did. On this occasion all three of us were in the room.

226. What became of the clothes of the corporal and Roque after their death?—They were thrown into the sea the day on which the soldiers died.

227. By whom?—By Manoel Antonio Alves.

228. Who, besides the guard, saw the Portuguese soldiers?—Doctor Almeida visited them once, and Portajo, the slave of Mr. Joao Baptista, also saw them.

229. Where did the corporal die; I mean, in what part of the Fort?—A day before he died he removed to the room where the “Eclair’s” people had been, and he never left it until he was carried out.

230. Where did Roque die?—Under the piazza.

231. When you were relieved where did you go to?—To a house in Pao de Varella.

232. Were you much visited in this house?—Yes; Anna Gallinha and Joanna Texeira were usually in this house.

233a. Where did you go to after you left the house in Pao de Varella?—To the barracks in Porto Sal Rey.

234a. When were you laid up?—I was still complaining when I went to the barracks, and was laid up in bed the next day.

235a. In the barracks?—Yes.

236a. How long were you in bed?—Three or four days.

237a. Did your comrades visit you?—Yes.

238a. Was any one then sick in the barracks?—Yes; Luis Briza.

239a. Do you know when the gunpowder was exploded in the Fort?—It was smoked (the Fort) by Antonio da Pinha, Antonio Santos, and Manoel Antonio Alves, while I was there. It was not whitewashed until afterwards.

240a. Have you ever been away from the island?—Yes, I was four years at Porto Praya in St. Jago, and returned two years since.

241a. Have you always had good health?—Always until I had the fever lately.

Pedro Manoel, private soldier (negro), native of San Antonio, aged 30, examined. Not the man who belonged to the First Guard.

233. You are a native of the neighbouring island San Antonio; how long have you been here?—Only seven or eight months.

234. Were you at the Fort during the time the crew of the “Eclair” were there?—No, I was not there while the “Eclair’s” crew were there. I was sent by the Commandant to attend the Portuguese soldiers who were taken sick after the “Eclair” sailed from Boã Vista.

235. How long did you attend them?—Upwards of three days.

236. What did they complain of?—They could not eat nor drink. they had vomiting of a black-looking stuff, and they talked foolishly.

237. Were they visited by a medical man?—Yes, Dr. Almeida saw them; but only once.

238. Did any one else besides Dr. Almeida see them: I mean any one from Porto Sal Rey?—Yes, another man; a slave belonging to Joao Baptista; his name was Portajo.

239. Do you know if he got fever?—I know he got fever, but I do not know at what time he died.

240. How long did you remain at the Fort after the Portuguese soldiers died?—About four days.

241. Were you at all unwell during these four days?—I was not quite well; and the Commandant fearing my comrade and myself might have fever about us, did not allow us to return to the barracks at Porto Sal Rey, but put us both into a small house in Pao de Varella.

242. How long did you remain in this house in Pao de Varella?—Seven or eight days; we then went to the barracks. In three or four days more I was taken ill with general fever, and then lived in the house of Manoel Joana, a storekeeper, when I was laid up in bed fifteen days; I had black-vomit, and was visited by the doctor of the Governor-General.

243. Were you visited by your friends when in the house of Manoel Joana?—Yes.

244. When you and your comrade Miguel Barbosa, were in the house at Pao de Varella, were you visited by any one?—Yes, by a great many; in particular by Anna Gallinha, a Portuguese woman, who cooked for us. Another woman, Joanna Texeira, was also constantly in the house.

245. What articles of clothing did you bring with you from the island?—We brought nothing from the Fort but the clothing on our backs. The first day we came to the house we stripped this clothing off, and gave it to the wife of Silvester José Romess, a mason, to be washed.

246. You are quite sure you brought no other articles of clothing from the Fort, except those you had on your back?—I am quite sure that neither Miguel Barbosa nor myself had any other articles of clothing.

247. What clothing did you wear while those you had on when you came from the Fort, were being washed by the wife of Silvester?—Some other clothes we had at Porto Sal Rey. They were brought to us by a man called Antonio Lopez, who is now dead.

248. Do you know when the rooms at the Fort were whitewashed?—I do not know when they were whitewashed; but I believe they were some days after the soldiers died—not while we were at the Fort.

249. Have you in general enjoyed good health?—Yes, always, until I had the fever.

249a. Are you quite sure that neither of the Portuguese soldiers was ever on board the “Eclair”?—I am quite sure they never were.

Manoel Joana, a mulatto, native of San Nicolao, aged 45, examined. It was in this man's house that Pedro Manoel was laid up with fever for a fortnight.

250. How long have you been in this island?—Since I was a child.

251. What is your trade?—I am a storekeeper (grog-shop-keeper).

252. When did Pedro Manoel come to your house sick?—After he had been in the house at Pao de Varella.

253. Who attended him?—I nursed him; and he was seen by the Governor-General's doctor.

254. How long was he in your house?—About a fortnight.

255. What did he complain of?—Headache and fever all over; he had also much vomiting.

256. Did many of his comrades visit him?—Yes.

257. When did you get the fever?—When the soldier was recovering; my wife was also taken ill after me.

258. You both soon recovered?—Yes.

Fourth Guard at the Fort.

This guard is not contained in the return of the Commandant. It consisted of—

Manoel Alves, private,
Lorenzo Samed, ditto,
Pedro Gonzalves, ditto.

Alves, it will be recollected, belonged to the Second Guard, and had also been employed to bury the Portuguese soldiers who died at the Fort.

Lorenzo Samed, private, (negro) native of St. Jago, aged 21, examined.

259. You state that you are a native of St. Jago; how long have you been at Boã Vista?—Eight or nine months.

260. What guard did you relieve at the Fort?—With Manoel Alves and Pedro Gonzalves, I relieved Miguel Barbosa and Pedro Manoel.

261. How long were you at the Fort?—I think about twelve or thirteen days.

262. When was Manoel Antonio Alves taken ill?—After we had been there about two days.

263. When was Pedro Gonzalves taken ill?—He was not taken ill until the first of our returning from the Fort to Porto Sal Rey.

264. Where did you and the rest of the guard sleep when at the Fort?—In the room next to that in which the Portuguese soldiers died.

265. Do you know when the room in which the soldiers died was cleansed?—I do not; but I know that it was cleansed some time after they died.

266. When were you attacked with fever?—Two days after I returned from the Fort to Porto Sal Rey.

267. Was fever general in the town when you and Pedro Gonzalves were laid up?—Yes.

268. Who relieved you at the Fort?—Andre Vass and Jose Sancha.

269. Had you ever fever when at St. Jago?—No, never.

270. Had Pedro Gonzalves or yourself ever been on board the “Eclair”?—No.

Fifth Guard at the Fort.

This guard consisted of *Andre Vass*, private, (negro) native of the Island of St. Jago, and *Jose Sancha*, private, (negro) native of San Antonio.

Andre Vass, private, aged 35, examined.

271. How long were you at the Fort before you were taken ill?—I was not taken ill until I had returned to Porto Sal Rey. Jose Sancha was attacked after we had been at the Fort only three days.

272. After Jose Sancha was taken ill, what did you do with him?—He remained several days ill; and at last a boat came and took us both away from the small island.

273. Did any one relieve you?—No one.

274. What room in the Fort did you occupy?—All parts of the Fort.

Jose Sancha, private, aged 20, examined.

275. When were you sent to the Fort Duke of Braganza on the small island?—I was sent with Andre Vass.

276. Were you ever at the Fort while the sick of the "Eclair" were there?—No.

277. How long were you at the Fort?—I was taken ill on the third day after I was there, and remained some days longer.

278. Where were you put on your return to the barracks at Porto Sal Rey?—In a room behind the barracks.

279. How long were you sick at the barracks?—About six days.

280. What did you complain of?—I had a severe headache; hot all over, and severe vomiting.

281. Did any medical man attend you?—Yes, I was seen by Dr. Almeida.

282. Were you ever on board the "Eclair"?—No, never.

283. Was there any fever in the town before you went as a guard to the Fort?—Yes.

N.B. Not one of the soldiers were ever on board the "Eclair;" see letter to that effect from Major Mascarenhas, the Military Commandant.

J. O. Mc W.

6A.—Evidence relative to the visitors of Miguel Barbosa and Pedro Manoel, private soldiers, while in the house at Pao de Varella after their return from the Fort.

John Jamieson called in and examined.

284. Do you know anything about those who visited Miguel Barbosa and Pedro Manoel while in the house at Pao de Varella after they returned from the Fort?—To my knowledge they were visited by a great many people, in particular by Anna Gallinha, a Portuguese woman since dead; Anna Texeira, a native; Silvester Jose Romess, and his wife.

285. Was Anna Gallinha attacked with fever?—Yes, she was; and hers was the first case that excited any apprehension, or indeed attracted any notice in Porto Sal Rey. I am aware that Justinian was sick some considerable time before this, and so was Corporal Perez. I also heard something of Anna Gaspar being unwell; but little if any attention was paid to the reports of the illness of any one until Anna Gallinha showed strong and suspicious symptoms. She was the first person that died from fever in Porto Sal Rey.

286. How long was Anna Gallinha sick? Only four days.

287. You mention suspicious symptoms, what were they?—High fever, wildness, and black vomit.

288. Did any medical man see her?

289. Was she visited by others?—Yes, by many. Joanna Texeira attended her as nurse. Manoel Affonso, a labourer, also was often in the house.

290. About what time was Anna Gallinha taken ill?—I am not quite sure, but I think about the 12th October last year.

291. Had she ever been on board the "Eclair" or at the Fort while the sick were there?—No, I am sure she never was at either.

292. Was Joanna Texeira taken ill? Yes, she was, about a week or ten days after Anna Gallinha's being taken ill.

293. Was she very ill?—No, not very ill; she was weak a long time after the fever left her.

294. Who attended Joanna Texeira?—Dr. Kenny as medical attendant, and her own son as nurse.

295. Was her son taken ill?—Yes, a few days after he had been acting as nurse to his mother.

296. How long was he ill?—Not more than five or six days.

297. When was Dr. Kenny taken ill?—Not until a considerable time afterwards.

298. When was Manoel Affonso laid up?—He was taken ill the day after Anna Gallinha died.

299. Do you know if Manoel Affonso had ever been on board the "Eclair," or at the Fort?—I am sure he had not been on board the

“Eclair,” nor was he ever at the Fort while the sick of the “Eclair” were there.

300. Had he seen Justinian or Corporal Perez?—I think he may have seen Justinian, but I am not at all sure.

301. How long was Manoel Affonso ill?—He died after four days’ illness.

302. Do you know any one who attended or visited Manoel Affonso during his illness? Yes, I know he was a good deal visited by a man called Luis Ignés, who is now at San Antonio.

303. Was this man not on board the “Eclair”?—Yes, he was.

304. Was he taken ill?—Yes, shortly after the death of Manoel Affonso; he was attended by Dr. Kenny, and recovered.

305. Were there any other visitors?—Yes, Gertrude Bent, her next-door neighbour; she was taken ill, and soon died.

306. Did all those you have mentioned as having been taken ill, live in Pao de Varella?—Yes, all of them.

307. Do you know anything of the woman who washed the clothing of Pedro Manoel and Miguel Barbosa, the soldiers who after returning from duty at the Fort on the small island, were for some time lodged in the house at Pao de Varella?—Yes, she is the wife of Silvester Jose Romess, a mason in Pao de Varella.

308. Was she or any one in the house taken ill after receiving the clothes?—Yes, she was; and so was Silvester himself.

309. When was Silvester taken ill?—I am not quite sure, but it was about the same time as Anna Gallinha was.

310. Was Silvester seen by any medical man?—Yes, she was attended by the late Dr. Kenny, and I think Dr. Almeida also saw him.

311. How long was he sick?—I do not know how long, but he was a long time poorly.

312. Do you know if he ever was on board the “Eclair” or at the Fort?—He was not at either.

Silvester Jose Romess, negro, native of San Nicolao, aged 33, examined.

313. How long have you been on the island?—Thirteen years.

314. Have you always enjoyed good health during that period?—Yes, always, with the exception of a severe cold I had nine years since, and an attack of fever I had after the steam-vessel “Eclair” left the island.

315. When were you attacked with the fever?—I do not know the date, but I was taken ill about the same time as Anna Gallinha was. I had fever when she died.

316. Did you visit any house where there was fever?—I never went into any house where there were sick, except to see Pedro Manoel and Miguel Barbosa, when they were in the house at Pao de Varella, after their return from the Fort on the small island.

317. Did your wife receive the clothes of the two above-named soldiers to wash them?—Yes, she received them the day they came from the island.

318. How long after your wife received the clothes was it that you were taken ill?—Three days; it might be a day or two more.

319. How long were you ill?—Nearly two months.

320. Was any one else in your house, besides yourself, taken ill with fever?—Yes, my child, ten years old, and my niece, sixteen years old, lastly my wife.

321. How long after you were taken ill were the children attacked?—About fifteen days.

322. And your wife?—Not until four or five weeks afterwards.

323. Your wife was a good deal in the house where the soldiers were at Pao de Varella?—Yes, she was.

324. Was she in other sick houses?—Yes, many.

325. Did your wife and children recover?—Yes, my wife, child, and niece all recovered.

326. Did any one else in your house take ill?—Yes, a man named Luis Barros was taken ill in my house early in November. This man was taken ill immediately after he had buried a fever corpse on the beach.

327. Had Barros ever been on board the “Eclair” or on the Fort?—No, never at either.

328. Was there any one else ill in your house?—Yes, a boy who left the island with Mr. Pettingal and family, and returned to Boã Vista in the same schooner (in which by this time Mr. Pettingal had died of fever at San Nicolao) was brought to my house ill with fever, and died in eight days with vomiting and dark bloody stools.

329. Was this boy a visitor at your house before he left the island with the late Mr. Pettingal?—Yes, he was; and I was at the time sick.

330. Do you know if any sailors died on board this schooner?—I have heard that one sailor died on board.

331. Can you recollect who were sick at the time you were taken ill?—Anna Gallinha and Manoel Affonso were both ill at the time, and so was Gertrude Bent.

332. Were they the first in Porto Sal Rey that were taken ill?—I think they were. Before that I heard of Corporal Perez being ill, but I did not see him. I forgot to say that I once saw Justinian when he was ill.

333. Did the soldiers look ill, when they were in the house at Pao de Varella?—Yes, particularly Miguel Barbosa.

Joanna Texeira, a mulatto, native of San Antonio, aged 59, examined.

334. How long have you been on this island?—Sixteen years.

335. Where do you live?—In that part of Porto Sal Rey called Pao de Varella.

336. Do you recollect when the soldiers Miguel Barbosa and Pedro Manoel came to the house in Pao de Varella on their return from the Fort?—Yes, I lived in the next room to them.

337. Were they sick?—They were not in bed, but they both complained, and were restless and had headache; they looked ill.

338. Do you know what clothes or other articles they brought from the Fort? Only the clothes they had on their backs, and a flag.

339. Do you know who washed the clothes they wore when they came to your house?—The wife of Silvester Jose Romess.

340. When did she get the clothes?—Immediately after they came to the house.

341. Did she come for the clothes?—Yes.

342. Do you know if any one was taken ill in Silvester's house?—Yes; Silvester himself, his wife, and children.

343. Did Anna Gallinha visit the house in which the two soldiers were?—Yes, she lived in the same room with me; in fact, in the same house, for my room was next to that of the soldiers. Anna Gallinha also cooked for the soldiers.

344. When was Anna Gallinha taken ill?—Just after the soldiers left the house; it might be several days.

345. Was she taken ill in your house?—Yes, she was.

346. How long was she ill?—Only four days.

347. Had she black vomit?—Yes, constantly, for some hours before she died.

348. What did she complain of at first?—Headache, fever, and pains all over.

349. Was Anna Gallinha visited by many during her illness?—Yes, by several.

350. Can you give me the names of two or three of those who visited her during her sickness?—Silvester's wife, Piedad Angelica, and my son, a boy of sixteen.

351. Were you taken ill?—Yes, I was.

352. When were you taken ill?—Three days after Anna Gallinha died.

353. Was your boy attacked?—Yes, about eight days after Anna Gallinha's death.

354. He recovered?—Yes, after only a week's illness.

355. Was Piedad Angelica taken ill?—No, but her family consisting of five or six children were all attacked.

356. Do you mean about the time you were ill?—No, not until the fever was general in Porto Sal Rey.

357. Now, to the best of your knowledge, who was first attacked with fever in Porto Sal Rey?—Anna Gaspar and Rosinha Santo Antao. I am not sure, but I think Justiniano was ill before they were.

358. Did you visit Anna Gaspar and Rosinha Santo Antao?—Yes, I did.

359. Did Anna Gallinha visit them?—No.

360. What sick people did Anna Gallinha visit before she was taken ill?—I am quite sure she saw no sick persons except Miguel Barbosa and Pedro Manoel when they were in my house.

361. Can you tell me when Anna Gaspar and Rosinha Santo Antao were taken ill?—No, I cannot, but it was some time before Anna Gallinha was attacked.

362. Who was next ill after Anna Gaspar and Rosinha?—Anna Gallinha.

Anna Gaspar, a mulatto, native of San Antonio, aged 25, examined.

363. How long have you been on this island?—Nearly four years.

364. Have you always enjoyed good health during that period?—Yes, always, until the steam-vessel the "Eclair" came here, when I got fever.

365. When did you get fever?—I had a slight attack of fever four or five days after the "Eclair" sailed.

366. How long were you ill?—About a week.

367. Had you been to see any sick people?—No.

368. Were you ever on board the "Eclair" or at the Fort on the small island?—No.

369. Did any of the people belonging to the "Eclair" visit your house?—Yes, several.

370. Blacks or Whites?—Two whites, who remained about an hour, and several blacks; this was while the sick were at the Fort.

371. Where is your house?—At Pao de Varella.

372. Have you had any illness since your attack of fever?—Yes, after I got well I went and saw several who were sick, and I got ill again.

373. How long were you ill the second time?—Only a few days.

374. Did you visit Anna Gallinha during her illness?—Yes, I saw her on the day she died.

Rosinha Santo Antao, a mulatto, native of San Antonio, aged 19, examined.

375. Were you in Porto Sal Rey when the "Eclair" was here?—Yes, I was.

376. Have you been ill since the "Eclair" came here?—Yes, I was ill at the same time Anna Gaspar was.

377. How long were you ill?—About a week.

378. What did you complain of?—Headache, and pain of back with general fever over the body.

379. Were you visited by any of the "Eclair's" people?—Yes, occasionally.

380. Have you in general had good health?—Yes, always, until I had the fever.

Pulcherra Gertrude, mulatto, native of Boã Vista, aged 30, widow of the late Antonio Perica, examined.

381. When was your late husband taken ill?—He was taken ill two days after he carried the corpse of Anna Gallinha and of Manoel Affonso to Rabil.

382. How long was he ill?—Seven days.

383. Had he ever been on board the “Eclair” or at the Fort?—No, he arrived from Madeira after the “Eclair” had left the island.

384. Had he much fever?—Yes, and vomiting.

385. What was the colour of the vomited matter?—Yellow.

386. How many were there in your house?—At first only my husband and myself.

387. Then were you taken ill?—Yes, I was, in about a week after he died.

388. Was any one else taken ill in your house?—Yes, a girl and a man called Eusebio da Luz, who came to attend my husband.

389. Did either of them die?—Yes, Eusebio da Luz died.

390. Are you sure he had not been on board the “Eclair” or at the Fort on the small island?—I am sure he never had. He however saw Manoel Affonso during his illness.

6B.—*Evidence of Justinian da Silva Georgio, spirit-storekeeper in Porto Sal Rey, whose house was resorted to by the petty officers, &c. of Her Majesty's ship “Eclair,” when on leave shortly after the vessel arrived at Boã Vista.*

Justinian da Silva Georgio, storekeeper, native of Boã Vista, aged 30, examined. (Porto Sal Rey.)

391. You, I believe, keep a spirit-store in Porto Sal Rey?—Yes, I do.

392. Were you visited by the people of the “Eclair” when they were at Porto Sal Rey on leave?—Yes, there were at least ten or twelve of them in my house.

393. How long did they remain at your house?—They were out and in until the evening. One man was ashore two days.

394. Do you recollect when it was that the men got leave?—I do not, but I think the crew were then at the Fort.

395. Did the man whom you mentioned as having slept on shore remain in your house?—No, he was somewhere in Pao de Varella.

396. It has been stated that you had fever about this time, was it so?—Yes, I had a headache and fever the evening of the day on which the sailors came to my house.

397. You are quite sure it was the same evening?—I am quite sure.

398. How long were you ill?—About a fortnight.

399. Where were you when you were ill?—In my own house.

400. Did many people see you while you were ill?—Yes, several saw me, and Doctor Almeida attended me.

401. Do you recollect the names of any others who visited you?—Yes, Anna Gaspar, Rosinha Santo Antao, Maria Nazarinha, José Antonio, Joaquim Lima, and others.

402. Were you not complaining a little before you were visited by the sailors?—Not in the slightest.

403. How were you employed for the month preceding that in which the “Eclair” came here?—I was as usual in my shop.

404. Have you always had good health until lately?—Yes.

405. Do you know who first died of fever at Porto Sal Rey?—Yes, I do. First, Anna Gallinha; then Manoel Affonso; then Maria Nazarinha; then Gertrude Bent; then Antonio Perica, then Lisboa, a writer;—all these lived near to each other in Pao de Varella.

7.—*Evidence of Senhor Ignacio Carvahal, merchant in Porto Sal Rey, relative to the origin and progress of the fever there.*

Senhor Ignacio Coreia Carvahal, native of Boã Vista, aged 56, merchant in Porto Sal Rey, examined.

406. Were you here when the "Eclair" arrived from the coast of Africa in August last?—Yes, I was.

407. Who was the first person you heard of as being sick during her stay or after she had gone?—I never heard anything of the sickness until Anna Gallinha and Manoel Affonso were taken ill. I heard that Manoel Affonso had in his possession a coverlet or blanket which had belonged to the "Eclair."

408. What was Manoel Affonso?—A labourer.

409. Do you recollect who was next attacked?—I think Anna Nazarinha, and next Lisboa the writer.

410. You lost a son, I hear?—Yes, I lost a fine boy of 18, who died of fever.

411. Was he ever on board the "Eclair" or at the Fort?—No, never at either.

412. Had he been among sick people?—Yes, he was with Lisboa, but he never saw any other sick person.

413. Did he remain long in Lisboa's house while Lisboa was sick?—He was there during two nights.

414. How long was Lisboa ill?—I think about six days.

415. When was your son taken ill?—He was taken ill the day Lisboa died.

416. How long was your son ill?—He died on the seventh day.

417. Was he ill in your house?

Second examination of *Senhor Ignacio Coreia Carvahal*.

418. Were you here when the "Eclair" was here?—I was.

419. You had some launches employed coaling and watering that vessel?—Yes.

420. Did you hear of any one being sick while the "Eclair" was here?—No.

421. Then who was the first person you heard of as being ill?—I did not hear of any one being ill until Anna Gallinha and Manoel Affonso were sick. I heard that Manoel Affonso had in his possession a coverlet which had belonged to some one in the "Eclair."

422. Did you know anything of Anna Gallinha?—I only heard of her as a Portuguese woman who had attended and cooked for Miguel Barbosa and Pedro Manoel, the soldiers who came from the Fort.

423. Do you know of any others who were sick about this time?—Yes, Maria Nazarinha and Lisboa the writer.

424. I understand you lost a son from fever?—Yes, I lost a fine boy eighteen years of age.

425. Had your son ever been on board the "Eclair" or at the Fort, or in any way had communication with the "Eclair"?—No, never.

426. Had he been at all among sick people?—Yes, he was a great friend of Lisboa's, and was during two nights in his house during his illness. He was taken ill the day Lisboa died.

427. Had your son not seen any other sick person besides Lisboa?—No, no one.

428. How long was Lisboa ill?—Six days.

429. How long was your son ill?—Six or seven days. He died on the 4th of November.

430. How many persons are there in your house in Porto Sal Rey?—About thirty persons inclusive of slaves.
431. Did any one in your house besides your son have fever?—No.
432. Who nursed your son?—My wife and daughter.
433. Have you had the fever?—No, not lately; but I had a fever, with black vomit, in 1817, at the Island of San Domingo in the West Indies.
434. How long have you been in this island?—I have been here nearly all my life; and I am now 56 years of age.
435. During what years have you ever known fever to prevail here?—I have never known fever to prevail anywhere in this island, except at Rabil.
436. Then at what times has fever prevailed there?—There was fever at Rabil in 1821 and the beginning of 1822.
437. Have you any idea how many died at that time?—About thirty persons.
438. When was the next visitation of fever?—In 1827.
439. How many died then?—I do not know: but there were very few deaths.
440. When was the next visitation?—In 1833 there were some attacks of intermittent, but few, if any, deaths took place.
441. Do you mean to say that all the visitations of fever which you have mentioned were confined to Rabil?—Yes, I am quite sure they were; for people came to Porto Sal Rey and to the other parts of the island to avoid fever, and they succeeded.
442. Have you never had fever in Porto Sal Rey?—Never, until after the departure of the “Eclair.”
443. You have been at Porto Praya in St. Jago?—Yes.
444. Have you been there during the prevalence of the fever?—Yes.
445. Were you attacked?—No.
446. Have you ever known the fever of St. Jago to be taken to any of the other islands?—No; no one ever considers it to be infectious, and no one fears it who is not at St. Jago.

8.—*Evidence of Senhor Joao Baptista, proprietor of salt-works, &c. in Boã Vista, relative to the fever in Porto Sal Rey, Boaventura, &c.*

Mr. Joao Baptista aged 38. Acting Vice-Consul, native of Boã Vista, examined.

447. Were you here during the time the “Eclair” was here?—Yes. I supplied the ship’s company with fresh provisions.
448. When did you hear that sickness had appeared on the island?—When Anna Gallinha, Silvester Jose Romess, and Manoel Affonso were ill.
449. You were aware that two European soldiers died at the Fort on the small island?—Yes; but we did not expect that the sickness would go any further.
450. How do you think the sickness got to Porto Sal Rey, or rather to that part of it called Pao de Varella?—By the negro soldiers who came from the Fort after the Portuguese soldiers died.
451. About what time did the sickness begin to excite alarm in Porto Sal Rey?—About the middle and towards the latter end of October.
452. Did you remain in Porto Sal Rey during the whole time of the sickness?—No, I left it on the 19th of November.
453. Where did you go then?—To my house at Boaventura.
454. Had any person in your house been taken ill by this time?—Yes, two of my slaves; one of them called Portajo died.
455. Was there any sickness in Boaventura when you went there?—My borther-in-law, Mr. Antonio da Graça Pinto, died on the 20th November there, but I do not know that there were any others sick at this time.

456. Was there much fever in Cabeçada at this time?—Yes.
457. Was there much intercourse between the Cabeçada people and the people of Boaventura?—No; we did not allow the Cabeçada people to come near our houses.
458. Did you hear anything of a slave having gone in the night-time from Boaventura to Cabeçada?—Yes, I did.
459. How long did you remain in Boaventura?—Until the 1st of January, when I returned with my family to Porto Sal Rey.
460. Was any of your family attacked after your return to Porto Sal Rey?—Yes, two of my slaves, called Domingos and Zacharias; my wife and five children were also attacked about this time: they recovered.
461. How many persons are there in your house?—Forty-two persons, including slaves.
462. At what time do you consider that fever was at its height in Porto Sal Rey?—In November. Sometimes eight died in one day.
- 463.—When was it greatest in Cabeçada?—In November and part of December.
464. When at Boaventura?—From the middle of December to January.
465. When did the Europeans begin to leave the island?—Some of them went away in October. In November General Norronha, and nearly all the Europeans who could leave the island, did so. The English Consul was here until the 2nd December, when he left for San Antonio.

9.—*Evidence of Vicente Antonio Oliveira, Carpenter, relative to the Fever in Boaventura and in the Eastern Villages.*

BOAVENTURA.

Vicente Antonio Oliveira, mulatto, native, carpenter, aged 30, examined.

466. Were you at Boaventura when the fever appeared at Cabeçada?—Yes, I was.
467. Can you tell me when the fever did appear at Cabeçada?—I cannot, but Joaquim Marques died on the 29th October; and as I heard there was more fever in Cabeçada, I thought it best to leave the place, which was so near to an unhealthy district, and accordingly, left on the 3rd November, and went to João Gallego, one of the northern villages.
468. Then, was there no fever in Boaventura when you left it on the 3rd November?—No.
469. How do you account for there being no fever in Boaventura, seeing that it prevailed in Cabeçada, which is only a few hundred yards from it?—We were careful in not allowing the Cabeçada people to have intercourse with those of Boaventura, and the Boaventura people took good care not to go to Cabeçada.
470. Did the Cabeçada people not come into the town?—Yes, they sometimes passed through the town, but they were not allowed to go into any of the houses.
471. How long do you think fever was prevented by the precautions you adopted?—The first case that I am aware of having taken place at Boaventura was that of Senhor Antonio da Graça Pinto, the brother-in-law of Senhor João Baptista; he was brought from Porto Sal Rey, sick, about the 15th of November, and died on or about the 20th of the same month.
472. Was there any other case about this time?—Yes, there was the case of Rosa Fortes, the servant of Mrs. Pettingal, who came home sick to her father's house in Boaventura, about this time.
473. Was any person taken ill in the house of Rosa's father?—Yes, all in the house were attacked with fever.
474. Do you know of any other case about the same time?—Yes, a slave belonging to Cecilia da Britho went by stealth in the night-time from Cabeçada to Boaventura, to see a friend or relation of his; he was

taken ill at Boaventura, and died in four or five days' illness. The fever spread from Rosa's father's house and the house where this slave died.

475. Do you know in whose house this slave died?—Yes, it was in the house of a woman called Ambrosia, who also was soon taken ill and died.

476. Well, you went to João Gallego; how did you find all there?—I found that two soldiers had only the day before arrived from Porto Sal Rey, and that they both had fever.

477. Then did you remain, notwithstanding the soldiers were there with fever?—Yes.

478. Seeing that you had left Boaventura to avoid fever, why did you not for the same reason leave João Gallego, when you found fever there?—I had removed my family of eight persons and all my furniture; moreover I had lent my house to another person, and had nowhere else to go.

479. How long was it before any one in the village was taken ill after the arrival of the soldiers?—I am not sure how long, but the mother of one of them called Antha Cotta was soon afterwards attacked and died.

480. Who was the next attacked?—A woman called Rufina Mends.

481. Had Rufina been in Antha Cotta's house?—I do not know, although I think it very probable, as they lived very near to each other.

482. Did Rufina die?—Yes, and another girl in the same house.

483. When was your family attacked?—My mother was first attacked and she was taken ill on the 6th of January, 1846.

484. How did you escape so long, and the fever in the same village?—We adopted great precautions; we never visited sick people, and scarcely spoke to any one.

485. How did the fever reach you after all?—It by degrees travelled to our next-door neighbours, and we were then attacked.

486. How many of your family had fever?—All, except my wife.

487. Did you all recover?—Yes.

488. When did you return to Boaventura?—On the 20th January, 1846.

10.—*Evidence of Lieutenant Joaquim José dos Santos, of the Artillery Battalion of the Cape de Verds, relative to the fever in various parts of the Island of Boã Vista.*

Lieutenant Joaquim José dos Santos, of the Artillery Battalion of the Cape de Verds, examined. Native of Portugal, aged 38.

489. Were you here when the "Eclair" arrived in August last?—No, I arrived here from the Island of Sal on the 24th of November last.

490. In what state did you find the island with regard to health?—I found Porto Sal Rey, and Cabeçada, (Rabil,) with much fever.

491. Were the soldiers sick at this time?—Yes, nearly all of them were laid up.

492. How long did you remain in Porto Sal Rey?—I did not leave it, except for a few days, when I went to see people ill at Cabeçada, and afterwards at the northern villages.

493. Do you recollect about what time you went to Cabeçada?—Yes, it was about the 24th of November.

494. Was there any sickness in Boaventura at this time?—I do not know; I did not hear of there being any sick there.

495. Did you go into any of the houses in Cabeçada where there were sick?—Yes, I went into a great many houses where there were sick.

496. When did you go to the northern villages?—I went there on the 29th of November.

497. What state did you find the villages in?—In Cabeça dos Tharafes I found many sick; at Fundo das Figueiras only one sick; and I am not aware that there were at this time any in João Gallego.

498. Did you return to these villages?—Yes, about the end of December.

499. What was their state then with regard to health?—João Gallego contained several sick; Cabeça dos Tharafes contained a great many sick; and the people at Fundo das Figueiras had established a cordon sanitaire between Cabeça dos Tharafes and their own village.

500. How was this cordon sanitaire formed?—It was formed by a guard of militia, who were called out for the purpose.

501. Then was Fundo das Figueiras quite healthy at this time?—No; there were several sick people in a house that had been converted into an hospital.

502. Did you at any time afterwards pay a visit to the northern villages?—Yes, I was there again on the 24th of February. At this time João Gallego contained about a hundred sick people. Fundo das Figueiras had also a number of sick. At Cabeça dos Tharafes the disease had abated, inasmuch as there were not more than five or six people sick there.

503. Was this your last visit to the villages?—Yes; on my return to Porto Sal Rey I had an attack of fever on the 2nd of March.

504. How do you think you got this fever?—When I was at João Gallego I took a son of Mr. Perfeira's in my arms; this boy died a few hours after I had thus supported him.

505. How long were you ill?—I had high fever seven days, and about three weeks of debility.

506. Has any one in your family been attacked?—Yes, all my family, consisting of seven persons. They all recovered.

507. How long have you been in these islands?—Nearly nine years.

508. Have you been at all the other islands?—Yes, I have been at all of them, with the exception of San Nicolao and San Antonio.

509. Have you been much at St. Jago?—I have been there very often, but never more than three or four months at a time.

510. Were you ever at St. Jago during an unhealthy period?—Yes, in July 1838, when I left St. Jago, there were a great many ill with the fever of the country.

511. Do you consider the endemic fever of St. Jago to be an infectious disease?—No.

512. Is it not generally considered to be so?—No.

513. Have you ever had fever on any of the other islands?—Yes, at Fogo I had an attack of intermittent, which troubled me more or less for fifty-three days.

514. Have you had any return of it since?—No; I have always been well since, up to the month of March last, when I caught fever here.

João Baptista, negro, native of Boã Vista, aged 28, examined.

This man was in no way connected with the "Eclair;" but his evidence is taken relative to the first appearance of fever in João Gallego, and as instance of escaping the fever by going into the country.

515. You belong to João Gallego?—Yes, I do.

516. When did you leave it?—Early in January.

517. How many left it with you?—In my own family, my mother and sister. There were however several others.

518. Where did you go to?—I went to a house on a hill called Montero.

519. How long did you remain there?—We are there still.

520. Have you or any of your family had fever?—No.

521. How did you escape, seeing you were until January in João Gallego, where the fever was raging?—We never went into any houses, and we avoided going near where there were sick.

522. Have you always enjoyed good health?—Yes, all of us.

Antonio Fidela, mulatto, native of Boã Vista, aged 35, examined.

This man was not connected with the "Eclair." He is examined with the same view as the former man was.

523. Were you at João Gallego when the fever first broke out?—Yes.

524. Who was first sick in João Gallego?—Two soldiers, who came from Porto Sal Rey.

525. Who was next sick?—Rufina, and Nicolao das Neves.

526. Have you been sick?—Yes, twice.

527. When had you the first attack?—About the 1st of February.

528. And the second?—After an interval of a fortnight.

529. Had you been in Porto Sal Rey before you were attacked?—Not for three weeks before I was taken ill.

530. Were there many sick in Porto Sal Rey when you visited it?—Yes, many; but I did not see any of them.

531. Did you see any of the sick at João Gallego before you were taken ill?—Yes, I attended my own sister, and she died.

532. How long was it after your sister died, that you were attacked?—More than a fortnight.

533. Had you seen any other sick people?—Yes, a great many.

534. How many are there in your house?—At present, my wife and one child only. I have four children, but I sent three of them away when the fever began, and they have escaped it.

535. Where did you send them to?—To a small house in the country.

536. Have your wife and child at João Gallego been attacked with fever?—Yes.

537. Did they recover?—Yes.

538. Have you and they in general had good health?—Yes.

Gustavus Fortes Varella, negro, native of Boã Vista aged 36, examined.
(Moradinha, or Santa Cruz.)

539. Were you at Moradinha when fever prevailed there?—Yes, I was.

540. Were you there when Luis Fortes Pathi was taken ill?—Yes, he was taken ill in my house.

541. How long did he remain in your house after he was taken ill?—Several days.

542. How many were there at that time living in your house?—Myself and wife.

543. Were you attacked?—Yes, and so was my wife; both about three weeks afterwards.

544. Who was first attacked at Moradinha?—First myself—then my wife; and next, a woman called Magdalena, who died.

545. Had she been all along in the village?—No, she had been attending a sick friend of hers in Pao de Varella.

546. Who was next taken ill?—Her brother; he also died.

547. How long were they ill?—Four or five days.

548. Did the fever attack the greater proportion of the inhabitants of Moradinha?—No, not one half were attacked.

549. How long have you lived in Moradinha?—Three years.

550. You have fever there occasionally?—Yes.

551. At what time of the year?—About the end of the year.

PART II.

Contents.

| No. | Page |
|--|------|
| 1. Labourers who were on board Her Majesty's ship "Eclair," from Porto Sal Rey, Rabil, Cabeçada, Boaventura, and Estacia or Old Town | 37 |
| 2. Evidence of Manoel Joaquim da Britho, relative to the fever at Estacia. | 56. |
| 3. Evidence of Senhor Nicolao Tavares, relative to the fever at Estacia | 57 |
| 4. Evidence of Libania Fernandez, who was one of the two persons first attacked with fever at Estacia | 57 |

Labourers who were on board the "Eclair" from Porto Sal Rey.

| Names. | Country. | Age. | How long on board. | If attacked with Fever, and when. | Result. |
|------------------------|----------------|------|---------------------|-----------------------------------|-----------|
| Eusebio Vicente | Native mulatto | 26 | 8 days | Dec. 1845 | Recovered |
| João Mariana | Do. | 50 | 3 „ | Nov. 27, 1845 | Do. |
| Antonio Maria Simoa .. | Do. | 25 | 8 „ | Dec. 1845 | Do. |
| Gregorio Tavares .. | African negro | 25 | 14 „ & in Loanda | Dec. 1845 | Do. |
| Joaquim das Neves .. | Native negro | 50 | 7 days | .. .. . | Do. |
| João Joaquim Perez .. | Native mulatto | 23 | 5 „ | Jan. 1846 | Do. |
| Luis Ignes | | | | | |
| Antonio Joana | | | | | |
| Pedro San Antonio .. | .. .. | .. | .. | .. .. . | Died |

Eusebio Vicente, an Albino mulatto, native of Boã Vista, aged 26, examined.

552. Were you on board the "Eclair" when that vessel was here?—Yes, I was.

553. How were you employed on board?—Hoisting in coals and water.

554. Did you go below?—Not below the lower deck.

555. Were you at the Fort while the sick of the "Eclair" were there?—No.

556. Were you on board the day on which she sailed from Boã Vista?—Yes, I was.

557. Did you return to Porto Sal Rey every night while you were employed, and when she left Boã Vista?—Yes; to the house of my aunt near the Consul's (English) house.

558. Who, besides yourself, reside in the house of your aunt?—Cousins.

559. Have you had fever?—Yes, I was attacked in December last.

560. Had you been among sick people before you were attacked?—Yes; I likewise carried the corpses of two people who died of fever, to Rabil.

562. How long was it before you were taken sick that you carried the corpses to Rabil?—A month or six weeks.

563. Had you been visiting sick people very shortly before you were taken ill?—Yes, I saw a woman who had fever fourteen days before I was laid up.

564. Did your aunt become sick?—Yes; three days after me.

565. And your cousins?—Yes; one of them, a day before I was attacked.

566. Did you all recover?—Yes; all.

567. Have you ever been away from this island?—Yes, I was twelve years at San Antonio.

568. How long is it since you returned?—Nine months.

569. Have you in general enjoyed good health?—Yes, always, until I had the late attack of fever.

Joao Mariana, dark mulatto, native of Boã Vista, aged 50, examined.

570. How long were you employed on board the “Eclair?”—I was employed getting up provisions from below. I also baled out water from the lowest part of the vessel. I was three days on board.

571. Was this during the earlier or latter period of her visit here?—Shortly after she came in.

572. Where did you go to after you left the “Eclair?”—To my launch, which was employed coaling the ship,

573. Did you go on board while you were employed coaling?—Yes, frequently.

574. Were you at the Fort while the sick were there?—No; but I was every day on the island at the coal-heap.

575. Were you on board the day the ship sailed?—Yes.

576. When the sick were brought on board?—Yes.

577. Did you return to your house in Porto Sal Rey immediately the ship sailed?—Yes.

578. What family have you?—A wife and four children.

579. Were you taken sick?—Yes.

580. How long after the “Eclair” sailed?—On or about the 27th November.

581. Was your wife sick?—Yes.

582. Before or after you?—She was sick after I was.

583. And your children?—The children were all taken ill after my wife in succession, and one twelve years of age died.

584. Had you or your wife been to see sick people?—Yes, I have seen a great many, and cupped them. I am a doctor of this country.

585. How long were you ill?—Eight days.

586. How long was your wife ill?—A long time; she very nearly died.

587. How long was the child ill?—Only a few days, and it died.

588. Had the child that died black vomit?—Yes.

589. Had you, your wife, or the children who recovered, black vomit? No.

590. Have you ever been at St. Jago or at any of the other islands?—Yes, I have been at St. Jago three years ago.

591. Had you fever while there?—No.

592. Have you always enjoyed good health on this island?—Always, until I had the late attack of fever.

Antonio Maria Simoa, dark mulatto, native of Boã Vista, aged 25, examined.

593. How, and how long were you employed on board the “Eclair?”—Eight days. I was hoisting provisions out of the hold, restowing the hold, and hoisting in coals and water.

594. Were you on board the day on which the vessel sailed?—Yes, I helped to hoist the cots in.

595. Were you taken ill with the fever?—Yes; but not until the beginning of December. I live in the same house with Eusebio Vicente, and was ill when he was.

596. Did you see many sick before you were taken ill?—Yes, before I was taken ill I went to Cabeçada (Rabil) to see Luis Fortes Pathi; I also saw Joana Aneceto who was sick, and whose mother soon afterwards took ill and died of black vomit.

597. Have you ever been away from the island?—Yes, I have been on the coast of Africa in a slave-ship, whence we went to Brazil with 600 slaves, and being chased by an English man-of-war, ran the ship on shore on the coast of Brazil. I have also been at St. Jago.

598. Have you ever had fever at St. Jago?—Yes, six years since at Porto Praya.

599. Have you in general enjoyed good health?—Yes, with the exception I have mentioned.

Gregorio Tavares, negro (slave), native of west coast of Africa, aged 25, examined.

600. Were you on board the “Eclair”?—Yes.

601. How long were you on board?—I went on board soon after the vessel came in to Boã Vista, and was employed either on board or in one of the launches until the vessel sailed.

602. Did you go on board the day the vessel came in?—Yes, I put several bags of foul linen into a boat, and came on shore from the ship, along with John Jamieson, the Consul’s storekeeper.

603. Were you at all in the hold of the “Eclair”?—No, I was chiefly in the launches. I am patroa of Mr. George Rendall’s launch.

604. Were you at all at the Fort while the sick of the “Eclair” were there?—No; but my duties led me to the island every day.

605. Have you had fever?—Yes.

606. When were you taken ill?—I do not know; but I believe I was the first person taken ill at Estacia.

607. Then you were taken ill at Estacia, and not at Porto Sal Rey?—Yes; at my master’s house at Estacia.

608. How long were you sick?—Nearly a month.

609. Did many people visit you during your sickness?—A great many; no doctor.

610. Who was the next person taken ill at Estacia?—João Maria Berba.

611. Did he come to see you when you were sick?—Yes, he did.

Joaquim das Neves, negro, native of San Antonio, aged 50, examined.

612. Were you employed on board the “Eclair”?—Yes, I was employed on board for six days.

613. How were you employed?—Hoisting in coals, and on the lower deck pumping water.

614. Were you ever at the Fort?—No.

615. Where do you live?—In Pao de Varella.

616. Did you go home every night?—Yes.

617. What family have you?—There are ten in the house altogether: my wife, children, nephews, and nieces.

618. Have any of you had fever?—Yes, all of us.

619. Who was first taken ill?—My wife’s mother.

620. When was she taken ill?—Two days after Manoel Affonso died.

621. Had she been to see Affonso?—Yes; she had also visited Anna Gallinha during her illness.

622. Who was the next person in your house taken ill?—Myself.

623. Had you seen any sick people before you were taken ill?—Yes,

I saw Manoel Affonso, José Carlos Lisboa a European who lived in the next room to Anna Gallinha and Anterno Perica.

624. How long were you ill?—About a fortnight.

625. Did the rest of your family recover?—Yes, all of them.

626. I understand you were a good deal employed burying the bodies of those who died of the fever; was it so?—Yes, I buried the bodies of a great many; I should say nearly a hundred.

627. Who assisted you?—Francisco Gaspar, Domingos San Antonio, and Antonio Tomatao.

628. Were you not also assisted by two Spaniards?—The Spaniards used to roll some of the bodies up in sheets.

629. Where were the bodies buried?—Chiefly in the sand on the beach, some at the burial-place at Rabil, and the rest at the burial-place behind Pao de Varella.

630. What depth did you dig the graves on the beach?—About five or six feet deep.

631. Can you tell me who first died in Porto Sal Rey?—Yes, it was Anna Gallinha.

632. And after Anna Gallinha?—Manoel Affonso, Maria Nazarinha, José Carlos de Lisboa, Gertrude Bent, Antonio Perica, Eusebio da Luz, and a man called Domingos, a sailor.

Joao Joaquim Perez, dark mulatto, native of San Antonio, aged 23, examined.

633. How long have you been in this island?—Three years.

634. How long were you employed on board the “Eclair”?—Five days.

635. How were you employed?—Hoisting in coals and water.

636. Have you a family?—No; I live in a house by myself in Pao de Varella.

637. Have you had an attack of the late fever?—Yes, but I was not attacked until January last.

638. Had you been to see any sick people?—Yes, I had been visiting several relations who were sick.

639. How long were you ill?—Ten days.

640. Has your general health been good in this island?—Yes, always, until I had the fever.

Labourers who were employed on board the "Eclair" from the town of Rabil.

CABECADA.

| Names. | Country. | Age. | How long on board. | If attacked with Fever, and when. | Result. |
|---------------------------|----------------|------|--------------------|--|-----------|
| Luis Fortes Pathi .. | Native mulatto | 40 | 8 days | Sept. 17, 1845 | Recovered |
| Thomé Domingos .. | Do. | 48 | 8 " | Dec. 1845 | Do. |
| José Angela | Do. | 49 | 2 " | Doubtful; but fever was common at Cabeçada | Do. |
| José Palinha | Do. | 26 | 8 " | Do. .. | Do. |
| Antonio Angela | Do. | 38 | 8 " | Do. .. | Do. |
| Joaquim Pathi | Do. | 37 | 4 " | Do. .. | Do. |
| João Luis Evangelista .. | Do. | 27 | 8 " | Jan. 1846 | Do. |
| Sebastiano Fernandez .. | Negro native | 24 | 6 " | When fever was raging | Do. |
| Manoel Domingos .. | Mulatto native | 20 | 6 " | Do. .. | Do. |
| Theophilo Gomez .. | Do. | 55 | 8 " | Not attacked | |
| Carlo da Rocha | Do. | 40 | 8 " | When fever was common at Cabeçada | Do. |
| Luis da Morães | Do. | 22 | 4 " | Do. .. | Do. |
| Manoel Antonio da Luz .. | Negro native | 53 | 4 " | Do. .. | Do. |
| Simplicio da Luz .. | Do. | 20 | 3 " | Nov. 1845 | Do. |
| Antonio Maria da Cruz .. | Mulatto native | 31 | 1 " | Doubtful | Do. |
| Manoel Antonio da Silva.. | Do. | 40 | 3 " | Oct. 1845 | Do. |
| Feliciano Domingos | | | | | |
| Antonio Luis Fortes | | | | | |
| Manoel Felipa | | | | | |
| Bartholo da Luz .. .. | .. .. | .. | .. | .. .. . | Died |

Rabil Labourers on board the "Eclair."

BOAVENTURA.

| Names. | Country. | Age. | How long on board. | If attacked with Fever, and when. | Result. |
|----------------------------|---------------------|------|--------------------|-----------------------------------|-----------|
| Dionysio da Cruz .. | Native negro .. | 24 | 8 days | When fever was general in Rabil | Recovered |
| Serafin da Rocha .. | Dark mulatto native | 30 | 8 „ | Do. | Do. |
| Luis Santos Nazario .. | Mulatto native .. | 25 | 3 „ | End of September | Do. |
| Antonio da Cruz .. | Native negro .. | 19 | 5 „ | Nov. 1 | Do. |
| Egidio da Britho .. | Do. .. | .. | 4 „ | Not attacked | Do. |
| Silvestion Lucio de Moraes | Do. .. | 25 | 3 „ | When fever was general in Rabil | Do. |
| João Neça .. | Dark mulatto native | 30 | 8 „ | Do. | Do. |
| Antonio José da Cruz .. | Mulatto native .. | 20 | 5 „ | Do. | Do. |
| João Ascensão .. | African negro .. | 36 | 5 „ | Do. | Do. |
| Antonio Barnabé .. | Dark mulatto native | 20 | 3 „ | Feb. 1846 | Do. |

Men from Rabil who were employed on board the "Eclair" at Boã Vista.

Luis Fortes Pathi, a dark mulatto, native of Boã Vista, aged 40, examined. (Cabeçada.)

641. Were you employed on board of the "Eclair?"—Yes, I was.
 642. How long were you employed on board of her?—About eight days.
 643. How were you employed?—Hoisting in water and coals.
 644. Did you go below?—Yes, I was on the lower deck for nearly a day, pumping water.
 645. Where were the sick at this time?—They were in the Fort on the small island. I was on board when they were brought from the island, the day the ship sailed.
 646. Were you ever at the Fort?—No, not while the sick were there, nor since.
 647. Did you return from the ship every night during the time you were employed?—Yes, I went to my house at Rabil every night.
 648. Did you at once go to Rabil when the "Eclair" sailed from Boã Vista?—Yes, the very day she sailed.
 649. Did you not take some small article of clothing, which you got on board "Eclair," with you to Rabil?—No, I took nothing but what I had on my back.
 650. What family have you?—I have none left.
 651. What family had you then?—I had a wife and three children.
 652. Did they all die of fever?—Yes, all of them.
 653. Were you attacked with fever?—Yes, I was first attacked.
 654. When were you attacked?—About three days after I went to Rabil from the ship.
 655. Are you quite sure you were taken ill so soon as three days after the ship sailed?—Yes, I am quite sure.
 656. You were with your family when you were taken ill?—No, I

was not. I went to my own house when I first returned from the ship ; but next day paid a visit to a friend of mine at Moradinha, a small village about half a mile to the south-east of Rabil, where a *feira* was being held, and was there taken ill.

657. How long did you remain at Moradinha?—I was there eight days, sick.

658. What did you complain of?—I had general fever, headache, pain of back and limbs—very sick.

659. Did you then return to your house in Rabil?—Yes, at the end of eight days I was carried to my house in Cabeçada (Rabil).

660. How long were you sick after your return to your own house?—Nearly three weeks.

661. Were you seen by any medical man?—No.

662. Did any one take sick in the house where you lay ill at Moradinha?—No, not until a long time afterwards.

663. Who, after yourself, was the first taken ill in your own family?—My daughter, 12 years of age.

664. How long after your return from the “Eclair,” or, if you can recollect better, after your return from Moradinha, was it that this girl was taken ill?—She was taken ill some time about the beginning of October.

665. How long was she ill?—Only three days.

666. What symptoms had she?—She had burning fever, and for several hours before she died, vomiting of black stuff and delirium.

667. Was she seen by any doctor?—No.

668. Which of the family was next attacked?—Another girl, about seven years of age, about four days after the first one died. She only lived four days and died in the same way as her sister.

669. Who was the next?—My boy, about eleven years of age ; he was taken ill within eight days after the second girl died, and lived only five days after he was seized.

670. And your wife next, and last?—Yes, my wife was taken ill on very same day as the last of the children died ; she lived fifteen days afterwards, and died with black vomit. She was not visited by any medical man ; but she took some medicine which was sent her by Dr. Almeida.

671. Were you the first person ill with fever in Cabeçada (Rabil)?—Yes, I am quite sure I was.

Thomá Domingos, a mulatto, native of Boã Vista, aged 48, examined.
(Cabeçada.)

672. What is your usual employment?—I am *patraó*, or coxswain, of one of Mr. George Rendall’s launches.

673. Were you on board the “Eclair” when she was here?—Yes, I was.

674. How long?—I was eight days employed on board.

675. How were you employed on board?—Hoisting in water and coals.

676. Did you go below?—Yes, I was in the hold, moving the tanks, had assisted to whitewash the hold.

677. Were you at the Fort or anywhere on the island while the crew of the “Eclair” were there?—No.

678. Did you return to your house in Rabil every night?—Yes.

679. Were you employed on board until the “Eclair” sailed from Boã Vista?—Yes, to the last day.

680. Did you return to Cabeçada (Rabil) immediately after the “Eclair” left Boã Vista?—Yes, at once.

681. Have you had fever since that time?—Yes.

682. When were you taken ill?—Myself and children were taken with fever in November last. I lost two children from fever, but at the time we were attacked, the fever was general in Cabeçada (Rabil).

683. Who, to the best of your knowledge, was the first person that had the fever in Rabil?—I think it was Luis Pathi.

684. Who was the next?—I am not sure, but I think Joaquim Marques was the next ; about this time several were taken ill ; Manoel Rosa and José Marques were among the number.

685. Have you in general enjoyed good health in this island?—Always, until I had the fever.

José Angela, a mulatto, native of Boã Vista, aged 48 years, examined.
(Cabeçada.)

686. You were, I believe, employed on board the “Eclair?”—Yes, I was.

687. How were you employed?—Hoisting in water and coals.

688. Did you go below?—No.

689. How was it you did not go below?—Because the people said there was fever in the ship below.

690. How long were you on board?—Only two days.

691. Were you discharged then?—No, I was sent to the watering-place to fill the casks, and swim off to the launch with them.

692. Did you at any time return to the “Eclair?”—No.

693. Were you at the Fort while the sick were there?—I was not at the Fort, but I was sometimes at the coal-heap on the small island.

694. Did you go to Cabeçada when the “Eclair” left Boã Vista?—Yes, at once.

695. Have you a family?—Yes, I have a wife and four children. My mother also resided with us.

696. Were you taken ill with fever?—Yes, but not until a great many were laid up in Cabeçada.

697. Had you been to see any sick in Cabeçada?—Yes, several; among them Luis Pathi and Manoel Rosa.

698. Who was the first person taken with fever at Cabeçada?—Luis Pathi.

699. How long were you ill?—About a week.

700. Did any medical man see you?—No.

701. Was any of your family taken ill?—Yes, my wife, children, and my mother.

702. How long after you were ill was it that your family were attacked?—My wife was attacked three days after I was, then my children in succession, and lastly my mother.

703. Did any of your family die?—Yes, my mother.

704. How long was she ill?—Only three days.

705. Had she been to see any sick besides those of your own family?—No, she was an old woman, and never went out of the house.

706. Have you in general had good health?—Yes, always, until I had fever.

707. Can you tell me how long it was after the “Eclair” sailed, that Luis Pathi was taken sick?—I cannot tell the time, but it was during a festa.

José Palinha, a mulatto, native of Boã Vista, aged 26, examined.
(Cabeçada.)

708. How long were you employed on board the “Eclair?”—Eight days.

709. How were you employed during that time?—Hoisting in water and coals, and in stowing provisions.

710. Then you were in the hold?—Yes, I was.

711. Were you on board the day the “Eclair” left Boã Vista?—Yes, I assisted in heaving the anchor up.

712. Where did you go to when the “Eclair” sailed?—To my house in Rabil, the first day, and in two days we returned to Porto Sal Rey, to get my pay for working on board the “Eclair.”

713. Did you then return to Rabil?—Yes.

714. Have you a family?—Yes, a wife and three children.

715. Were you or any of your family taken ill with fever?—I was not, but my wife and children all were attacked.

716. When were they attacked?—Not until November, when many had fever in Cabeçada.

717. Did your wife go to see people who were sick.—Yes, she nursed several sick people.

718. Did your wife and children all recover?

719. Have you in general had good health?—Always.

720. Who, do you think, was first taken ill at Cabeçada?—Luis Fortes Pathi.

Antonio Angela, a dark mulatto, native of Boã Vista, aged 35, examined.
(Cabeçada.)

721. You were, I believe, a labourer on board the “Eclair?”—Yes, I was.

722. How long?—Eight days.

723. How were you employed on board?—Moving the tanks about, hoisting in coals and water, and doing anything I was told.

724. Were you at the Fort during the time the sick were there, or at any time afterwards?—I was not near the place while the sick were there; but after they left I went with John Jamieson to put the coal-heap on the island to rights.

725. Did the sick return from the Fort to the vessel before you left her?—Yes, I helped to get them on board.

726. Did you go to Cabeçada when the vessel sailed?—Yes, I went to my mother’s house there.

727. Were there others besides yourself and mother then residing in the house?—Yes, Theophilo Gomez.

728. Have you had fever since the “Eclair” left?—Yes, I have.

729. When had you fever?—I do not know dates, but it was some time after Luis Pathi and Manoel Rosa were ill.

730. Was your mother attacked?—Yes, she was attacked about three days after I was.

731. Did you go and see many sick people?—Yes.

732. Did your mother visit sick people?—No.

733. Was Theophilo Gomez taken ill?—No, he went to Estacia.

734. Did your mother recover?—Yes.

735. How long was she ill?—About a month.

736. Have you ever been at St. Jago?—Yes.

737. Had you fever while there?—Yes.

738. How long were you ill at St. Jago?—Nearly a month.

739. How long is it since you were there?—Twelve months.

740. Have you in general enjoyed good health on this island?—Always, until the steamer came here.

Joaquim Pathi, a mulatto, native of Boã Vista, aged 37, examined.
(Cabeçada.)

741. Are you related to Luis Pathi?—Yes, he is my cousin.

742. Were you employed on board the “Eclair?”—Yes, I was four days on board.

743. Were you employed on board during the last four days the vessel was here?—Yes, I assisted to weigh the anchor.

744. Did you assist in getting the sick on board?—Yes, I assisted in getting them out of the boats.

745. Did you go to Rabil after the vessel sailed?—Yes, immediately the vessel sailed.

746. What family have you?—A wife and three children.

747. Were you attacked with fever?—Yes.

748. When were you attacked?—I am not sure of the time, but I know it was after my cousin Luis Pathi was sick.

749. Had you been to see your cousin when he was ill?—Yes, I went to see him when he was ill at Moradinha.

750. How long after you saw your cousin at Moradinha was it that you were taken sick?—It was not for some days; for my cousin was brought to Cabeçada, where I again saw him before I was laid up.

751. Do you know who were among the first taken ill with fever at Cabeçada?—Yes; my cousin Luis Pathi and his children first, then Manoel Fachina, then Manoel Rosa, then Luis Delgado Nazario, and next Joaquim Pacho or Marques.

752. Had Manoel Fachina ever been on board the “Eclair” or at the Fort?—I cannot say.

753. Was Manoel Rosa on board or at the Fort?—Yes, he belonged to one of the launches, and was on board the “Eclair,” and at the Island where the Fort is.

754. Was Luis Nazario ever on board the “Eclair” or at the island?—No.

755. Where does Luis Nazario live?—He lives next door to me.

756. Had he been to see your cousin Luis or yourself?—He came and saw me when I was ill; I do not know whether he saw my cousin.

757. How long were you ill?—Eight or nine days.

758. How long was your wife ill?—Only five or six days.

759. And the children?—They had only slight attacks of a few days.

760. Your wife and children all recovered?—Yes, all of them.

761. Have you ever been to any of the other islands?—Yes, to Sal and San Nicolao.

762. Were you sick at either of these islands?—No.

763. Have you in general enjoyed good health?—I never had a headache until I was attacked with the late fever.

Luis Delgado Nazario, mulatto, native, aged 43, examined. This man was not employed on board the “Eclair,” but he is examined here on part of Joaquim Pathi’s evidence.

764. You were not on board the “Eclair” during her late visit to this island; nor at the Fort, when her sick crew were there?—No, I was at neither.

765. Had you fever during the time that vessel was here, or at any time afterwards?—Yes, I had fever after she sailed from this island.

766. Where were you when you were laid up?—At Rabil.

767. Had you visited any sick people at Rabil or anywhere else?—Yes, I visited Joaquim Pathi, who is my next-door neighbour, when he was sick; also Joaquim Marques, who lives close to me; he and his sons had fever when I saw them. I likewise saw Manoel Rosa when he had fever.

768. Did you not go occasionally to Porto Sal Rey?—Yes, I went there sometimes, but not into any sick houses.

769. What family have you?—A wife and two children.

770. Were they taken ill?—Yes, after me.

771. Were they a long time unwell?—They were not more than four or five days sick.

772. They all recovered?—Yes.

773. Have you ever been at St. Jago, or any of the other islands?—I have been at Sal, San Nicolao, and San Antonio, but never at San Jago.

774. Have you in general had good health?—Yes.

João Luis Evangelista, negro, native of Boã Vista, aged 27, examined.
(Cabeçada.)

775. How long were you employed on board the “Eclair”?—Eight days.

776. How were you employed?—Hoisting in coals and water, and pumping water on the lower deck.

777. Were you in the hold?—No.
778. Were you at the Fort on the small island?—I was on the island, but not at the Fort.
779. Were you on board when the sick came from the Fort?—Yes, I was.
780. Have you had fever?—Yes.
781. When were you attacked?—Not until the latter end of the sickness on the island.
782. What family have you?—I have a wife—no children.
783. Was your wife attacked?—Yes, she was taken ill before I was.
784. Had she been among sick people?—Yes, she had been with her father, Marques Antonio Lopez, when he had the fever.
785. Was your father-in-law ever on board the “Eclair”?—Yes, he went on board to get water-casks.
786. Was he at the Fort.—No.
787. Had he been visiting others who were sick?—Yes, a great many.
788. Did he recover?
789. Did your wife recover?—Yes, she was ill about sixteen days.

Dionysio da Cruz, negro, native of Boã Vista, aged 25, examined.
(Boaventura.)

790. How long were you on board the “Eclair”?—One day only on board; and seven days at the coal-heap on the island.
791. On what day were you on board?—It was several days before she sailed.
792. Did you go below?—No.
793. Have you had fever since the “Eclair” was here?—Yes, I had an attack about two months since, and a relapse a short time back.
794. Were you visiting sick people before you had fever?—Yes, I visited the father of Mrs. Pettingal’s servant Rosa.

Sebastiano Fernandez, negro, native of Boã Vista, aged 24, examined.
(Cabeçada.)

795. You were, I believe, a labourer on board the “Eclair”?—Yes, I was six days employed on board of her.
796. You always came on shore in the evening?—Yes, I always went to Rabil in the evening.
797. How were you employed?—Hoisting in coals and water.
798. Were you at the Fort?—No.
799. Were you on board the day the ship sailed?—Yes.
800. Have you had the fever which has been prevailing here?—Yes.
801. When were you attacked?—Not until the fever was raging in Cabeçada.
802. Have you a family?—A wife and four children.
803. Had you been among sick people?—Yes, I saw Joaquim Pathi’s mother sick.
804. Were your wife and children taken ill?—Yes, all of them.
805. Did they recover?—Yes.
806. Have you ever been away from the island?—Not since I was a child, when I was at Brava.
807. Have you ever had any illness before the late attack of fever?—Never.

Manoel Domingos, mulatto, native of Boã Vista, aged 20, examined.
(Cabeçada.)

808. How long were you on board the "Eclair?"—Six days.
809. Were you at all below?—Yes, I was in the hold getting provisions up and restowing them; I was also employed hoisting in coals and water.
810. Were you on board the day the ship sailed?—Yes.
811. Were you at the Fort the day the sick were there?—No.
812. Have you had an attack of the late fever?—Yes; but the fever was general in Porto Sal Rey and Rabil before I was attacked.
813. Did you go to see sick people?—Yes, I went to see Luis Pathi, Joaquim Marques, and some others in Cabeçada.
814. How long were you ill?—Only four or five days.
815. With whom do you live?—With my father and step-mother.
816. Were you the first person taken ill in the house?—No, my father was.
817. Had your father visited any sick person before he was taken ill?—Yes, he had been to see Luis Pathi and many others.
818. How long was your father ill?—He died on the fifth day.
819. Had he ever been on board the "Eclair" or at the Fort?
820. Was your step-mother taken ill?—Yes, after my father.
821. How long was she ill?—She was ill six days and died.
822. Had she visited many sick persons?—I do not know.
823. Have you ever been away from this island?—No, never.
824. Have you ever had fever or any illness before you had the late attack?—No, not since I was a child.
-

Theophilo Gomez, native of Boã Vista, a mulatto, aged 35, examined.
(Cabeçada.)

825. How long were you employed on board the "Eclair?"—Eight days.
826. How were you employed on board?—Hoisting in coals and water, and in the hold moving tanks about.
827. Were you at the Fort while the sick were there?—No.
828. Were you on board the day the vessel sailed?—Yes.
829. Did you return to Rabil every night, and when the vessel sailed?—Yes, I did.
830. What family have you?—A wife only.
831. Have you had fever?—No; but I am continually troubled with pains in my limbs.
832. Has your wife been attacked?—Yes, but very slightly.
833. Did you remain at Cabeçada during the time of the sickness?—No; when the fever broke out we went to Estacia.
834. Was your wife taken ill at Estacia?—Yes.
835. Then was there fever in Estacia before she was taken ill?—Gregorio Tavares and Simond da Cruz were both ill before she was. I do not know any others that were sick before her in Estacia.
836. Did you attend her in her illness?—Yes.
837. Who else besides yourself saw her in her illness?—The wife of a man called Joaquim Lalli: at this time a man called Justinian da Silva Britho came from Porto Sal Rey; he fell sick at once and died.
838. Did the wife of Joaquim Lalli recover?—Yes.
839. Have you ever been away from the island?—No.
-

Carlo da Rocha, mulatto, native of Boã Vista, aged 40, examined.
(Cabeçada.)

840. You were a labourer on board the "Eclair?"—Yes, I was eight days on board.

841. How were you employed on board?—In getting in coals and water and in storing provisions in the hold.

842. Were you on board the day the “Eclair” sailed?—Yes, I was.

843. Were you at the Fort while the sick were there?—No, but I was on the island during one day, working at the coal-heap.

844. Did you return to Rabil when the “Eclair” sailed from Boã Vista?—Yes.

845. What family have you?—A wife only.

846. Were you attacked with fever?—Yes.

847. When were you attacked?—I do not know the time; but Joaquim Marques, Joaquim Pathi, and Manoel Rosa, were all sick before I was.

848. Did you visit them when they were sick?—Yes, I did.

849. Was your wife sick?—Yes, she got fever after attending upon me a short time.

850. Had she been to see many who were sick?—No, no one but myself.

851. Did your wife recover?—Yes.

852. Is your house near to that of Luis Pathi?—Yes, quite close to it.

853. Have you in general enjoyed good health?—Yes, always until I had the fever.

854. Have you ever been away from the island?—Yes, fifteen years ago I was a short time at San Antonio.

Luis da Moraes, dark mulatto, native of Boã Vista, aged 22, examined.
(Cabeçada.)

855. How long were you on board of the “Eclair?”—Four days.

856. How were you employed during that time?—Hoisting in coals and water.

857. Did you go below?—Not below the lower deck.

858. Were you at the Fort?—No.

859. Were you on board when the ship was weighing anchor?—Yes, I was.

860. Have you had the fever?—Yes, I have had fever twice.

861. When were you first taken ill?—I do not know; but fever was common in Cabeçada when I was taken ill.

862. Who do you live with?—With my master, Antonio Nazario.

863. Was your master sick?—Yes, he was sick before I was.

864. Had your master been much among sick people before he was taken ill?—Yes, he had seen a great many in Porto Sal Rey, as well as in Cabeçada.

865. How long were you ill?—Four days.

866. Had you been to see many sick?—No, only my master.

867. Have you ever been off the island?—No.

868. Have you in general had good health?—Yes.

Manoel Antonio da Luz, negro, native of Boã Vista, aged 53, examined.
(Cabeçada.)

869. You were employed on board the “Eclair?”—Yes, I was four days on board when she first came in.

870. How were you employed?—Hoisting in water.

871. Were you below?—I was some time on the lower deck pumping, and in the engine-room.

872. Did you return to Cabeçada every night?—Yes, I did.

873. Were you also employed in the launches?—Yes, I was five days employed in one of the launches.

874. How many are there in your family?—Nine in all.

875. Have you had the fever?—Yes, I had fever some time early in November.

876. Who were sick before you were, in Cabeçada?—Joaquim Marques, Luis Pathi, and some others.

877. Who was first attacked in your house?—My son, a boy of fifteen.

878. Had this boy been among sick people?—Yes, he had been with his brother, a soldier in the barracks, who was sick.

879. Who was next taken ill in your house?—Myself.

880. How long was the boy ill?—Four days.

881. How long were you ill?—Nearly a month.

882. Were the others of the family sick at the same time?—Yes, the fever ran through the whole of them.

883. Had you been much among sick people?—Yes, I had been with Luis Pathi and Joaquim Marques.

884. Did all your family recover?—Yes, all of us.

885. Have you ever been away from the island?—Yes, I have been at San Jago and Sal.

886. Have you in general enjoyed good health?—Yes.

Simplicio da Luz, negro, native of Boã Vista, aged 20, examined.
(Cabeçada.)

887. How long have you been a soldier?—I became a soldier just after the “Eclair” left this island.

888. Were you employed on board the “Eclair?”—Yes, I was.

889. How long were you employed on board?—Three days. I was five days at the watering-place.

890. Were you at all below, when on board the “Eclair?”—Yes, I was working one day on the lower deck.

891. Were you at the Fort while the sick was there?—No.

892. Were you attacked with fever?—Yes, I was attacked after I became a soldier; I was then in the barracks where there were several sick.

893. How long were you ill?—Only a few days.

894. Were you visited by your friends?—Yes, by my brother, who afterwards took sick.

895. Did your father also visit you?—Yes, he did.

896. Have you ever been away from the island?—No.

897. Have you in general had good health?—Yes.

Antonio Maria da Cruz, dark mulatto, native of Boã Vista, aged 31, examined. (Cabeçada.)

898. How long were you employed on board the “Eclair?”—Only one day, watering.

899. Were you in any other way employed for that ship?—Yes, I was five days at the coal-heap on the island.

900. Did you go to the Fort while the sick were there?—I used sometimes to go to the tent where the water was kept, but not among the sick people.

901. Were you on board the ship?—Yes, I was on board the day the vessel sailed, and assisted in getting the anchor up.

902. Did you go to Rabil every night while you were employed in the ship and on the island?—Yes, with the exception of the night on which she sailed, when I slept at the house of Antonio Perica, in Porto Sal Rey.

903. You live in Cabeçada?—Yes.

904. Have you had the fever?—Yes.

905. When had you fever?—I do not know the time; but there were

several sick before me, Luis Fortes Pathi, Joaquim Marques, Joaquim Pathi, and others.

906. Had you been to see any of them?—Yes, I was in the habit of taking soup to my cousin, Joaquim Marques, when he was sick.

907. Who was the first person you knew of as being sick at Cabeçada?—Luis Fortes Pathi.

908. Do you know if he was taken ill at Cabeçada?—He was ill at Moradinha, when at a dance there; he was removed to Cabeçada, and recovered; but his wife and three children died of fever.

909. Were you not in the habit of visiting Porto Sal Rey before you were taken ill?—Yes, I went to see Manoel Affonso and Antonio Perica, who is my cousin.

910. Was Luis Pathi sick before Manoel Affonso was?—Yes, long before.

911. Did your wife visit Antonio Perica and Manoel Affonso?—Yes, she did.

912. What family have you?—A wife and one child; a little boy from San Antonio was also living with us at this time.

913. Who was first attacked with fever in your house?—My wife.

914. Had she seen many sick?—Yes.

915. Who was next attacked?—My son, a boy twelve years of age.

916. And next?—Myself.

917. How long was your wife ill?—Four days; she had very high fever, getting stronger (the fever) every night; she recovered.

918. How long was the boy ill?—Three days; the first and second days high fever, and then constant black vomiting until he died.

919. Did any medical man see him?—Only one of our country doctors.

920. What did the boy from San Antonio complain of?—Fever with vomiting; but he had no black vomit.

921. How long was he ill?—Eight days.

922. How long were you ill?—I was about a week confined to bed.

923. Who came to see you during your illness?—Only a few; Christophe Pinheiro and some others; they all had fever afterwards.

924. Have you ever been away from this island?—Yes, I have been at all the Cape de Verds except Brava.

925. Have you ever had fever before your late attack?—No.

926. Have you in general enjoyed good health?—Yes.

Manoel Antonio da Silva, native of Boã Vista, aged 40, examined.
(Cabeçada.)

927. How long were you on board the “Eclair?”—Three days.

928. Did you go below?—Yes, I was sometimes on the lower deck.

929. Were you employed also in the launches?—Yes, for three days.

930. Were you on board when she sailed?—Yes.

931. Have you had fever?—Yes.

932. When had you the fever?—Some short time after Joaquim Marques; I think it was about the end of October.

933. How many are there in your house?—My wife and five children.

934. Had you been to see sick people?—Yes, I had seen a child of Luis Pathi and a child of Fachina, who were both sick, and died.

935. Who was first taken ill in your house?—Myself.

936. Who next?—In two days more the whole of my family were attacked.

937. Were they long ill?—They were ill from three to five days with high fever.

938. They all recovered?—Yes.

939. Have you ever been off this island?—Yes, I have been to the coast of Africa three years ago, and had then a slight fever.

940. Has your health, in general, been good?—Yes.

Serafin da Rocha, dark mulatto, native of Boã Vista, aged 30, examined.
(Boaventura.)

941. Were you employed on board the "Eclair?"—Yes, eight days.
 942. Were you below?—Yes, I was working on the lower deck two days.
 943. Were you quite well all the time you were on board?—Yes.
 944. Did you return to Rabil when the "Eclair" sailed?—Yes.
 945. Have you a family?—No, I am a single man. I live with my mother and sister.
 946. Have you had fever?—Yes, but not until the sickness was nearly over.
 947. Had you been visiting many sick people?—No, I kept out of their way as much as I could. I was only ill a few days.
 948. Was your mother or your sister sick?—My mother was slightly after I was.
-

Luis Santos Nazario, dark mulatto, native of Boã Vista, aged 25, examined.
(Boaventura.)

949. Were you employed on board "Eclair?"—Yes.
 950. How were you employed?—In coaling, and in whitewashing the hold.
 951. How long were you in the hold?—One day only.
 952. How long were you employed altogether?—Three days on board, and two days at the watering-place swimming off to the launches with casks.
 953. Did you go to Rabil when the "Eclair" left this island?—Yes.
 954. Have you had fever?—Yes.
 955. Who do you live with?—My father and mother.
 956. When were you attacked?—Four or five days after Luis Pathi was.
 957. How long were you ill?—Only three days.
-

Antonio da Cruz, negro, native of Boã Vista, aged 19, examined.
(Boaventura.)

958. How long were you employed on board the "Eclair?"—Five days.
 959. How were you employed?—Taking coals and water.
 960. Were you below?—Yes, I was in the engine-room.
 961. Were you in the hold?—No.
 962. Were the sick on shore while you were employed on board?—They came on board from the Fort the last day the vessel was here.
 963. Did you return to Rabil when the vessel sailed?—Yes, to the house of my father and mother.
 964. How many are there in the house?—Four brothers and sisters in addition to myself, father, and mother.
 965. When were you attacked with fever?—I think it was about the beginning of November.
 966. How many were sick in Boaventura before you were?—I am sure I was among the first taken sick at Boaventura; but there were some sick there before me. M. Antonia da Graça Pinto; Rosa Fortes, servant of Mr. Pettingal; Rosa's father and mother, were all sick when I was taken ill.
 967. When was Mr. Pinto taken ill?—I am not sure; he was taken ill at Porto Sal Rey, and brought to Boaventura: I rather think he was the first person who had fever there.
 968. How long were you laid up?—Eight days.
 969. Did any medical man see you?—No.

970. Were the others of your family taken ill?—Yes.

971. Before or after you?—About three weeks after me my brother Luiz was attacked.

972. Did any of your family die?—Yes, my sister, nineteen years of age.

973. When was she taken ill?—I was the first attacked, then Luiz my brother, then my mother, then my sister who died, and last Dionysio.

974. How long was your sister ill?—Seven days.

975. What did she complain of?—She talked foolishly; and some time before her death had black vomit.

976. Did you visit many sick people before you were taken ill?—No; but I was ordered by the mayor to carry dead bodies from Porto Sal Rey to Rabil.

977. How long after you did this was it that you were attacked with fever?—About a week.

978. Have you in general enjoyed good health?—Yes, always, until lately.

Egidio da Britho, dark mulatto, native of Boã Vista, aged 38, examined.
(Boaventura.)

979. You were on board the “Eclair?”—Yes.

980. How long were you on board?—Four days.

981. Were you on board during the early or latter part of her stay here?—I was on board the day on which she sailed from this place.

982. You returned to Rabil when the “Eclair” sailed?—Yes, the same day.

983. Have you a family?—Yes, I have a wife and two children.

984. Have you had fever?—No.

985. And you were in Rabil during the time the sickness was prevailing?—No; when the sickness began, I removed with my family to the east side of the island, where there are only three small houses.

986. When did you return?—Not until March last.

987. Did any of your family take sick?—Yes, a child of mine, three years of age, took sick five days after we returned.

988. Had this child been among sick people?—Yes, she had been to see her grandmother who was laid up with fever.

990. Did the child recover?—Yes.

991. Have you ever been away from this island?—No.

992. Have you in general enjoyed good health?—Yes.

Silvestion Lucio de Moraes, negro, native of Boã Vista, aged 25, examined. (Boaventura.)

993. How long were you employed on board the “Eclair?”—Three days.

994. How were you employed?—Hoisting in coals and water.

995. Were you at the Fort while the sick were there?—No.

996. Were you on board when the vessel sailed?—Yes, I was on board on that day.

997. Did you return to Rabil when the vessel sailed?—Yes.

998. Have you a family?—I have a wife and child.

999. Have you had the fever?—Yes, I have; but I was not taken ill until January last.

1000. Was your wife or your child taken sick?—Yes, both of them.

1001. Who in the house was first attacked?—First my wife, then myself, and the child last.

1002. Had your wife been among sick people?—Yes, a good deal.

1003. Did you all three recover?—Yes.

1004. Have you in general had good health?—Yes.

Joao Neça, dark mulatto, native of San Antonio, aged 30, examined.
(Boaventura.)

1005. How long have you been at Boã Vista?—Twenty years.
 1006. What is your usual employment?—I am a labourer, working in boats at the salt-pans, or at anything I can get.
 1007. How long were you employed on board the “Eclair”?—Eight or nine days.
 1008. Were you employed below?—Yes.
 1009. What were you doing below?—I was stowing coals.
 1010. Were you at the Fort while the sick were there?—No.
 1011. Did you return to Rabil when the “Eclair” sailed?—Yes, I did.
 1012. Have you a family?—I have a wife; no children.
 1013. Were you or your wife taken ill?—Yes, my wife was taken ill.
 1014. When was she taken ill?—Not until the sickness was general in Boaventura.
 1015. Do you know who was first taken ill at Boaventura?—I do not know.

Antonio José da Cruz, mulatto, native of Boã Vista, aged 20, examined.
(Boaventura.)

1016. How long were you employed on board the “Eclair”?—Five days.
 1017. How were you employed during this time?—Hoisting in coals and water.
 1018. Were you on board when the sick were brought from the Fort?—Yes, I was.
 1019. Did you go below?—Yes, I was employed some time moving iron ballast in the hold.
 1020. Have you been sick?—Yes.
 1021. When were you taken sick?—I do not know.
 1022. Who were sick in Boaventura before you were?—Antonio da Cruz, Dionysio da Cruz, Serafin da Rocha, and several others.
 1023. Do you live with your father?—Yes, with my father and mother.
 1024. Were they taken ill?—No.
 1025. Were you in any of the houses where there were sick?—No.
 1026. Was your father or mother?—I do not know.
 1027. Did your mother nurse you?—Yes.
 1028. How long were you sick?—Four or five days.
 1029. Have you in general had good health on the island?—Yes.

João Ascensao, negro, native of coast of Africa, aged 36, examined.
(Boaventura.)

1030. How long were you employed on board the “Eclair”?—Five days.
 1031. How were you employed?—Hoisting in coals and water.
 1032. Have you had fever?—Yes, I had fever in Porto Sal Rey.
 1033. Do you know about what time you had the fever?—No, I do not; but it was just after Nazarinha died. I rolled her up in her winding-sheet; I also did the same for Antonio Perica.
 1034. How long were you ill?—Only three days.
 1035. Where do you live?—In the house of Cecilia da Britho, my mistress.
 1036. Was any one else taken ill in the house?—Yes, a little girl, who attended me during my illness.

1037. Have you been away from the island since you first came from Africa?—No, never.

1038. Have you in general enjoyed good health?—Yes.

Antonio Barnabé, dark mulatto, aged 20, native of Boã Vista, examined.
(Boaventura.)

1039. How long were you employed on board the “Eclair”?—Three days.

1040. Did you ever go to the Fort?—No.

1041. Did you go below?—Yes, on the lower deck.

1042. Did you go to your home in Rabil every night?—Yes.

1043. Have you had fever?—Yes, I have only very lately recovered.

1044. How many are there in your house?—Now, only my father, five brothers and sisters, and myself. One of my brothers died.

1045. Have you all had fever?—Yes.

1046. Who was first attacked?—My brother Manoel, who died.

1047. When was he taken ill?—Not until the 7th of February.

1048. Had he been at all among people who had fever?—Yes; although we were all much afraid of fever, yet my brother saw Dr. Kenny when he was ill. People from sick houses were always coming to us; and we lived close to Rosa, Mrs. Pettingal’s servant, when she had fever.

1049. How long was your brother Manoel ill?—Three days; he died with black vomit.

1050. How long were the others sick?—From four or five days to a week.

1051. Did all recover, except Manoel?—Yes.

1052. Were you and your family at Boaventura during the whole time of the sickness?—Yes.

1053. Did you all attend upon Manoel when he was sick?—All except my father, who went into the next house.

1054. Have you in general had good health?—Yes.

Labourers on board the “Eclair” from Estacia.

| Names. | Country. | Age. | How long on board. | If attacked with Fever, and when. | Result. |
|----------------------|----------------|------|--------------------|------------------------------------|------------|
| Miguel Nane | Mulatto native | 26 | 4 days | When Fever was general in Estacia. | Recovered. |
| Narcisso da Graça .. | Ditto .. | 26 | 1 ditto | Ditto | Ditto |

Narcisso da Graça, mulatto, native of Boã Vista, aged 26, examined.

1055. How long were you on board the “Eclair”?—Only one day.

1056. How were you employed during that day?—Hoisting in water.

1057. Where were the sick at the time you were on board?—They were at the Fort.

1058. Were you ever at the Fort while the sick were there?—No; but I was at the island six days while the sick were there.

1059. Were you taken ill with fever?—Yes, I was taken ill at Rabil.

1060. When were you taken ill?—Not until January, when the fever was common.

1061. How long did you remain at Rabil?—Until I was a little better; perhaps a week.

1062. Did your wife get fever?—Yes, she got fever two days after we arrived at Estacia.

1063. Did she recover?—Yes.

Miguel Nane, mulatto, native of Boã Vista, aged 26, examined. (Estacia.)

1064. You were a labourer on board the "Eclair?"—Yes, I was four days on board.

1065. How were you employed?—Hoisting in coals and water, and in storing provisions in the hold.

1066. Were you at the Fort among the sick?—No, I was on the island, but not at the Fort.

1067. Did you return to Porto Sal Rey every night?—Yes.

1068. When the ship sailed, did you remain at Porto Sal Rey, or did you go on to Estacia?—I went to Estacia the next day.

1069. Did you find any one sick at Estacia?—No one.

1070. Who was first taken sick at Estacia?—The first I knew of was João Chico Fernandez and Libania.

1071. Who was next taken ill?—I do not know.

1072. Were you taken sick?—Yes, some time in November.

1073. Were there many sick at this time?—Yes.

1074. How long were you ill?—Nearly three weeks altogether.

1075. Have you a family?—Yes, I have a wife and one child.

1076. Were they taken ill?—Yes; first my wife, after me, and then my child.

1077. Did they recover?—Yes.

1078. Had you and your wife been to sick people before you were attacked?—Yes.

1079. Do you know how long João Chico Fernandez and Libania were at Estacia before they were taken ill?—They came from Cabeçada (Rabil), sick.

1080. Have you ever been away from the island?—No.

1081. Have you always, until lately, had good health?—Yes.

ESTACIA.

Manoel Joaquim da Britho, dark mulatto, native of Boã Vista, aged 60, (stone mason,) examined.

1082. Where do you generally live?—In Estacia.

1083. Were you at Estacia when fever first appeared there after the departure of the "Eclair?"—Yes, I was.

1084. Who was first taken sick at Estacia?—I am not quite sure who was first sick, but my brother Justinian Silva da Britho was the first person that died there of fever.

1085. When did he die?—About the latter end of November.

1086. Did you go to see him?—Yes, as did also my brother, who was called Fortunato Antonio da Britho.

1087. Were you taken sick?—Yes, about five weeks after the death of Justinian.

1088. Had Justinian seen many sick people before he was taken ill?—Yes, he had just come from Porto Sal Rey, when the fever was raging, before he was taken ill at Estacia.

1089. Had he been on board "Eclair" or at the Fort?—No.

1090. How long was it after he came from Porto Sal Rey that he was taken ill?—Three days.

1091. How long was he ill?—He died on the fifth day.

1091a. Was Fortunato attacked?—Yes, he was.

1092. How long after Justinian's illness?—About eight days after, when he was removed from Estacia to Porto Sal Rey, and died.

1093. Had Fortunato seen any sick besides his brother?—Not that I am aware of.

1094. Do you think he was on board the "Eclair" or at the Fort, while the sick were there?

1095. Who attended Fortunato during his illness?—A boy called Francisco.

1096. Was this boy taken ill?—Yes, and he also died after four days' illness.

1097. Was any one else attacked in Fortunato's house?—Yes, a child of Fortunato's, which also died.

1098. (2nd Examination.) You lost a brother called Luis from fever?—Yes, he had been about ten days only from Porto Praya, and was taken ill and died at Estacia some time in December.

Senhor Nicolao Tavares, mulatto, farmer at Estacia or Povoção Velha, native of Boã Vista, aged 60, examined.

1099. Were you here when fever broke out at Estacia?—I was at Estacia.

1100. Who was first sick at Estacia?—A son and daughter of Chico Fernandez; their names are Joao Chico Fernandez and Libania.

1101. Who was next taken ill?—Justinian was ill about the same time. He had just come from Porto Sal Rey. He was my nephew; he died on the 24th of November.

1102. What did he complain of?—Fever, pains of head, and all over his body; he had vomiting of blood before he died; and there was black blood all about his mouth after he died.

1103. Had Justinian been among sick people before he was taken ill?—I cannot say, for he came from Porto Sal Rey, and I am nearly always at Estacia.

1104. Did you visit Justinian?—Yes.

1105. Have you had fever?—No.

1106. Did any of the visitors have fever?—Yes; both of Justinian's brothers, Luis Vicente and Fortunato, were taken ill, and died.

1107. Had they been in Porto Sal Rey, or had they been anywhere else besides Estacia, when people had the fever?—Fortunato had been at Porto Sal Rey, and he was taken there, and he died there; but I am quite sure that Luis Vicente had not left Estacia for several days before he was taken ill.

1108. When did Luis Vicente die?—At Estacia, on December 13.

1109. How long was he ill?—Only a few days.

1110. At what period do you think the fever was at its worst at Estacia?—In November and December.

1111. Are you quite sure there was no one sick in Estacia before the arrival of the son and daughter of Chico Fernandez?—I am perfectly sure.

Libania Fernandez, negress, native of Boã Vista, aged 24, examined.
(Estacia.)

1112. When and where were you attacked with fever?—My brother Joao Chico Fernandez and myself were at Rabil in November, where many were ill with fever. We left Rabil (Cabeçada) some time in the same month, and as we were then not very well, we were carried on donkeys. We went to Estacia, and were almost the same day laid up with fever.

1113. Had you seen many sick in Cabeçada?—Yes, several.

1114. Had you been in Porto Sal Rey?—No, not for months; at least I can speak for myself.

1115. Was there no one sick in Estacia, when you arrived there?—I have every reason to think that we were the first sick in Estacia.

1116. How many were there in the house?—My father, mother, and five children.

1117. Were you all attacked?—Yes, all except my little sister.

1118. Did you all recover?—Yes.

1119. Do you know any one else who was sick after you were?—Yes, the family of Simao Antonio da Cruz, who lived near to us. Six children died in that house.

PART III.

Contents.

Lists of men who were employed in the launches coaling and watering Her Majesty's ship "Eclair" when that vessel was at Boã Vista—

- 1. From Porto Sal Rey ;
- 2. From Rabil—Cabeçada.

The evidence of the survivors is also given.

LIST of Men who were employed in the Launches while the " Eclair" was at Boã Vista.

| From Porto Sal Rey. | Country. | Ages. | How long in launches. | If ever on board " Eclair," or at Fort. | If attacked with fever, and when. | Result. |
|---------------------------------|----------------|-------|-----------------------------|---|---|-----------|
| Domingos Soares .. | Native mulatto | 42 | 8 days | On board "Eclair" | 1845 End of Nov. | Recovered |
| Lorenzo Gomes .. | Negro | 30 | 2 do. | Do. | Dec. | Do. |
| Manoel Jezus .. | Mulatto | 31 | 8 do. | Neither | Dec. | Do. |
| Manoel dos Santos Conceição. | Negro | 25 | 6 do. | In Fort, but not among sick | Nov. | Do. |
| Pedro Ascensão .. | Do. | 25 | 5 do. | On board "Eclair" | Not attacked | |
| Sopriano dos Santos | Do. | 60 | 6 do. | Do. | Nov. | Do. |
| Felipe dos Santos .. | Do. | 40 | 5 do. | At Fort; day sick; left it | Early in Dec. | Do. |
| Manoel Ambrosia .. | Do. | 45 | 2 do. | Neither | End of Dec. | Do. |
| Rafael dos Santos .. | Do. | 21 | 3 do. | Do. | Dec. | Do. |
| Verissimo da Rocha | Do. | 30 | 8 do. | On board ship | End of Dec. | Do. |
| Manoel Antonio As- censão. | Do. | 32 | 2 do. | Neither | Do. | Do. |
| Vicente Ignacio .. | Do. | 30 | 2 do. | On board "Eclair" | Not attacked | |
| Portajo .. .. | .. .. | .. | .. | .. .. | Nov. | Died |

Domingos Soares, dark mulatto, (slave,) native of Boã Vista, aged 42, examined.

- 1120. Were you employed in the launches coaling and watering the " Eclair ?"—Yes, I was eight days so employed.
- 1121. Did you go on board the " Eclair ?"—Yes, I generally went on board when the launch was being discharged.
- 1122. Were you on board when the sick came on board ?—Yes, I was.
- 1123. Have you had fever?—Yes, I was taken ill at Boaventura, some time towards the latter end of November.
- 1124. Had you been among sick people?—Yes, I had been a good deal with Mr. Pinto, brother-in-law to Mr. João Baptista. Mr. Pinto died.

1125. How long were you ill?—Two months nearly. I was a long time weak.

1126. Did any one else take sick in the house you lived in?—Yes, a boy who attended upon me was taken ill, and very nearly died.

1127. Did any others in the house take sick?—Yes, I live in Mr. Baptista's house, and all the family had fever after me.

1128. Have you ever been away from the island?—Yes, I have occasionally been at San Jago, San Nicolao, and Sal.

1129. Have you in general had good health?—Yes.

Lorenzo Gomes, negro, (slave,) native of Bissão, aged 30, examined.

1130. How long were you employed in the launches attending upon the "Eclair"?—Only during the last two days she was here.

1131. Were you ever on board the "Eclair" or at the Fort, while the sick were there?—I was on board the ship, but not nearer the Fort than the tent where the water was kept.

1132. Have you had fever?—Yes, I was taken ill in December last, after I had attended Portajo, another slave of Mr. Baptista's, who died of fever.

1133. Have you in general had good health?—Yes.

Manoel Jezus, mulatto, native of Boã Vista, aged 31, examined.

1134. How long were you employed in the launches attending upon the "Eclair"?—Eight days.

1135. Were you on board the ship, or at the Fort?—I was on the island, but not at the Fort; nor was I on board the ship.

1136. Did you return to your house every night?—Yes.

1137. What family have you?—No children. I live with a woman.

1138. Have you had fever?—Yes, after it had become general in Boaventura.

1139. Then you went to Boaventura?—Yes.

1140. You were among sick people there?—Yes, I attended Domingos Soares during his illness.

1141. Have you ever been away from the island?—No.

1142. Have you in general had good health?—Yes.

Manoel dos Santos Conceição, negro, native of Boã Vista, aged 25, examined.

1143. How long were you employed on board the launches?—Six days.

1144. Were you on board the ship or at the Fort?—I was once at the Fort, but not near any of the sick.

1145. Have you had fever?—Yes.

1146. When?—Some time in November last.

1147. Where do you live?—In Pao de Varella.

1148. Had you seen any sick people before you were taken ill?—Yes, I had been with Manoel Affonso when he was sick, and was taken ill very soon after he died.

1149. Is your house near to that in which Manoel Affonso died?—Yes.

1150. How many are there in your house?—Only my wife and myself.

1151. Was your wife attacked?—Yes.

1152. When was she attacked?—Just after me.

1153. Had she seen any sick person besides yourself?—Yes, she had seen Manoel Affonso.

1154. How long were you ill?—Ten days.

1155. And your wife?—Four days; she was a long time weak.

1155a. Were you visited by many when you were sick?—Yes, Antonio d'Anninha and Carlotta Varella attended upon us.

1156. Had they the fever?—Yes, both of them.

1157. Have you been about the islands much?—Yes, I have been to all the Cape de Verds and to Bissão.

1158. Have you ever had fever at any of them?—No.

Pedro Ascensão, negro, (slave,) native of San Nicolao, aged 25, examined.

1159. How long were you employed in the launches coaling the "Eclair"?—Five days.

1160. Were you on board the vessel?—Yes, I was on board every day, and the day on which she sailed.

1161. Have you had fever?—No.

1162. Have you been where there were sick people?—Yes. I also buried several fever corpses.

1163. Where do you live?—I in general live with my mistress, Cecilia da Britho, but she went away to Bella Vista when the fever broke out.

1164. Did she escape the fever?—Yes.

1165. Where did you go to when your mistress went to Bella Vista? I went to Boaventura, to attend another slave.

1166. Did this slave die?

1167. And you yourself were never attacked?—No, never.

Sopriano dos Santos, negro, (slave,) native of the coast of Africa, aged 60, examined.

1168. How long were you employed in the launches while the "Eclair" was here?—Six days.

1169. Did you go on board the ship?—Yes, when the launch was being unloaded I used to go on board.

1170. Were you at the Fort?—I was once or twice in the yard, but not amongst the sick.

1171. Have you had the fever?—Yes, I was attacked about the beginning of November.

1172. Had you been among sick people?—Yes; Angela, another slave, was sick in my master's house.

1173. And you attended Angela?—Yes.

1174. How long were you ill?—About six days.

1175. Have you in general had good health?—Yes.

Felipe dos Santos, (slave,) native of coast of Africa, aged 40, examined.

1176. How long were you in the launches while the "Eclair" was here?—Five or six days.

1177. Were you ever on board the ship?—No.

1178. Were you at the Fort?—Yes, I went with a slave called Portajo (since dead) the same day the sick left. We brought with us some pieces of old rope, which had been used in making the tents.

1179. Where did you take this rope to?—We sold it to a Jew in Porto Sal Rey.

1180. What is the name of this man?—I do not know.

1181. Have you had fever?—Yes.

1182. When were you sick?—I was sick just after I had been attending upon Portajo, who died. I also attended others in my master's (João Baptista's) house.

1183. How long were you ill?—Four or five days only.

1184. Have you in general had good health?—Yes.

Manoel Ambrosia, negro, native of Boã Vista, aged 45, examined.

1185. How long were you employed in the launches when the "Eclair" was here?—Two days.

1186. During the early or latter part of her stay?—About the middle.

1187. Were you on board, or at the Fort?—I was at neither.

1188. Have you had fever?—Yes.

1189. When were you taken ill?—Not until the latter end of December.

1190. Had you been with sick people?—Yes, I had been with my mother and my wife's brother, both of whom were sick.

1191. How many are there in your house?—My wife and five children.

1192. Was your wife attacked?—Yes.

1193. Had your mother been to see any sick person?—Yes, she had been to see Jose Moorgita, a slave belonging to Cecilia da Britho.

1194. Were your children attacked?—Yes.

1195. Did they all recover?—Yes.

1196. Have you ever been away from the island?—Yes, I have been at the whole of the Cape de Verd Islands.

1197. Have you ever had fever at any of these until lately?—No.

Rafael dos Santos, a Mandingo negro, (slave,) aged 21, examined.

1198. How long were you in the launches?—Three days, while the "Eclair" was coaling.

1199. Were you on board the ship or at the Fort?—I was at neither.

1200. Have you had fever?—Yes, slightly.

1200a. When?—In December last.

1201. Were you among sick people?—Yes, I had waited upon several fever patients in my master's house.

1202. How long were you ill?—Only a few days.

1203. Have you in general had good health in this country?—Yes.

Verissimo da Rocha, mulatto, (slave,) native of Boã Vista, aged 30, examined.

1204. How long were you employed in the launches while the "Eclair" was here?—Eight days.

1205. Were you at all on board the ship?—Yes, I was on the deck.

1206. Did you not go below?—No.

1207. Have you had fever?—Yes, I had fever at Boaventura about the end of December.

1208. Had you seen sick people?—Yes, a great many; I also buried the body of Dr. Kenny.

1209. How long were you ill?—Eight days.

1210. Have you ever been off the island?—No.

1211. Have you in general had good health?—Yes.

Manoel Antonio Ascensao, negro, native of Fogo, aged 32, examined.

1212. How long were you employed in the launches while the "Eclair" was here?—Only two days.

1213. Were you at all on board the "Eclair" or at the Fort?—No, I was at neither.

1214. Have you had fever?—Yes, I was taken ill at Porto Sal Rey in December last.

1215. Had you been among sick people?—Yes, I had seen many sick.

1216. How long were you ill?—Twelve days.

1217. Who attended you?—João Ascensao and Pedro Ascensao*, slaves. They both got fever soon afterwards, but both of them recovered.

Vicente Ignacio, negro, native of Boã Vista, aged 32, examined.

1218. How long were you employed in the launches while the “Eclair” was here?—Two days.

1219. Did you ever go on board the ship?—Yes.

1220. Have you had fever?—No.

1221. When had you the fever?—I have not had fever at all.

1222. Were you in your master’s house when his son died?—Yes, I was, and occasionally saw him.

1223. Were you in any other houses where there were sick?—Yes, I was in many sick houses.

LIST of Men who were employed in the Launches while the “Eclair” was at Boã Vista.

| Names. | Country. | Ages. | If ever on board “Eclair,” or at the Fort. | If have had Fever, and when. | How long in the Launches | Result. |
|-------------------------|----------------|-------|--|---|--------------------------|-----------|
| From Cabeçada (Rabil): | | | | | | |
| Manoel Rosa | Mulatto native | 42 | On board last day | Oct. 1845 | 15 days | Recovered |
| Manoel Fachina .. | Ditto | 27 | Neither | Ditto | 6 do. | Ditto |
| Lucas Domingos .. | Negro native | 38 | On upper deck | When Fever was general in Cabeçada | 11 do. | Ditto |
| Silvester Lopez .. | Ditto | 53 | Neither | Ditto | 4 do | Ditto |
| Fernino Nazario .. | Mulatto native | 59 | Ditto | Ditto | 10 do. | Ditto |
| Manoel da Silva Marques | Ditto | 25 | On board | After Luis Pathi was brought to Cabeçada, Sept. 1845. | 8 do. | Ditto |
| Joaquim Marques .. | .. | .. | .. | .. | .. | Died |
| Portoliano Evora .. | .. | .. | .. | .. | .. | Ditto |
| Sopriano Gonzalves .. | .. | .. | .. | .. | .. | Ditto |
| Joao Apolinano .. | .. | .. | .. | .. | .. | Ditto |

* A mistake, Pedro Ascensao had not fever. Vide Question 1161.

Manoel Rosa, a mulatto, native of Boã Vista, aged 42, examined.
(Cabeçada.)

This man was taken ill about the time that Luis Fortes Pathi was laid up with fever, or soon after.

1224. You were, I believe, employed in one of the launches, watering and coaling the "Eclair"?—Yes, I was fifteen days so employed.

1225. Were you at all, on board the "Eclair"?—Yes, I was on board the day on which she sailed.

1226. What were you doing on board?—I went on board to assist in weighing the anchor.

1227. Were the sick then on board?—They came on board while I was there.

1228. Did you go home immediately the vessel sailed?—Yes, I did.

1229. What family have you?—Two children only.

1230. Were you attacked with fever?—Yes.

1231. When were you attacked?—I do not know when, but it was after Luis Pathi was sick; also after Joaquim Pathi and a child of Manoel Fachina's were taken ill.

1232. Had you seen Luis Pathi or any sick person before you were attacked?—No, I had not seen any sick person.

1233. You are quite sure?—Yes, quite sure.

1234. How long were you ill?—About ten days.

1235. What did you complain of?—General fever, with pain of head and back.

1236. Did any medical man see you?—No.

1237. Were your children taken ill?—Yes, the only one in the house (the other being away in the country) took fever two days after her attendance upon me.

1238. How long was she ill?—She was ill about a week, and had some vomiting, but not black vomit.

1239. When did your daughter return from the country to Cabeçada?—About three weeks since.

1240. Has she had fever?—No.

1241. Did any one else visit your child while you were sick?—Yes, several; my own relations, Maria Angelica, Margarita Marques, and Dorothea.

1242. Did any of them get fever?—Yes, Maria Angelica, five days afterwards.

1243. Had she seen any sick person besides yourself?—I do not know.

1244. Have you ever been away from the Island of Boã Vista?—Only on one occasion; I went to San Antonio for a few weeks, twelve years since.

1245. Have you in general had good health?—Always, until I had the late attack of fever.

Manoel Fachina, a mulatto, native of Boã Vista, aged 27, examined.
(Cabeçada.)

1246. How long were you employed in the launches coaling and watering the "Eclair"?—I was employed only in coaling.

1247. How long were you employed coaling?—About six days.

1248. Were you on board the "Eclair"?—No.

1249. Were you at the Fort?—No, I was only at the coal-heap on the island.

1250. Were you attacked with fever?—Yes.

1251. What family have you?—A wife and one child; I lost one child eight years old, with fever.

1252. Who was first attacked in the house?—My wife and both children were sick before I was.

1253. Had your wife been to visit any sick person?—Yes, she had

been a good deal in the house of Luis Pathi, who was sick among the first if not the very first sick at Rabil.

1254. How long was it after Luis Pathi's illness that she was taken ill?—I cannot say how long.

1255. How long was the child ill?—Three days; the last few hours she had black vomit.

1256. Was any one else taken ill in this neighbourhood?—Yes, several: Joaquim Pathi, Manoel Rosa, and others. The fever soon extended over Cabeçada.

1257. Have you ever been away from the island?—No, not since I was a child.

1258. Have you always enjoyed good health?—Yes, always, until lately.

Lucas Domingos, negro, native of Boã Vista, aged 38, examined. (Cabeçada.)

1259. What is your usual employment?—I am patrao, or coxswain of one of Mr. George Rendall's launches.

1260. Were you employed in that capacity when the "Eclair" was here?—Yes, I was coaling and watering that vessel.

1261. How long were you so employed?—About eleven or twelve days.

1262. Were you on board the "Eclair"?—Yes, frequently.

1263. Did you go below?—No.

1264. Were you ever at the Fort whilst the sick were there?—No, I never went away from the coal-heap.

1265. You belong to Cabeçada?—Yes, I do.

1266. When the "Eclair" sailed you returned to your home?—Yes.

1267. Were you taken ill?—Yes.

1268. When were you taken ill?—At the same time with my brother Thomé.

1269. Did you visit him when he was sick?—Yes.

1270. What family have you?—A wife and three children.

1271. Were they taken ill?—Yes, all of them.

1272. Did they all recover?—Yes.

1273. They attended upon you?—Yes.

Silvester Lopez, negro, native of Boã Vista, aged 53, examined. (Cabeçada.)

1274. How long were you employed in the launches attending upon the "Eclair"?—Four days.

1275. Were you ever on board the ship?—No, never.

1276. Did you go to the Fort?—No.

1277. Have you had fever?—Yes.

1278. When?—I do not know the time,

1279. Who was sick in Cabeçada before you were?—Luis Pathi, Joaquim Marques, Manoel Fachina's child, Joaquim Pathi, and others.

1280. How many are there in your house?—My wife and four children.

1281. Who was first taken ill?—My wife.

1282. How long was she ill?—She was twice ill; the first time a week, and the last time fifteen days.

1283. How long was the interval?—A week.

1284. Who was next attacked?—A daughter, called Maria; the fever then passed through the whole family.

1285. You all recovered?—Yes.

1286. Have you and your family in general had good health?—Yes.

Fernino Nazario, mulatto, native of Boã Vista, aged 59, examined.
(Cabeçada.)

1287. How long were you employed in the launches while the "Eclair" was here?—Ten days.
 1288. Were you on board the ship?—No.
 1289. Were you at the Fort?—I went on several occasions to the gate, but I was not among the sick.
 1290. Have you had fever?—Yes.
 1291. Did you see any sick people before you were attacked?—Yes, I saw my brother Luis Nazario when he had the fever.
 1292. How many are there in your house?—My son, his wife, and myself.
 1293. Who was first attacked?—Myself, then my son, and his wife.
 1294. Had they seen any sick people besides yourself?—Yes, I think so.
 1295. Did they recover?—Yes.
 1296. Have you in general had good health?—Yes.
-

Manoel da Silva Marques, mulatto, native of Boã Vista, aged 25, examined. (Cabeçada.)

1297. How long were you employed in the launches when the "Eclair" was here?—Eight days.
 1298. Were you at all on board the ship or at the Fort?—I was on board the day the vessel sailed from this island.
 1299. Have you had the fever?—Yes.
 1300. When were you attacked?—I think there were only three or four persons ill in Cabeçada before I was.
 1301. Who was ill before you were?—Luis Pathi, a child of Luis Pathi's, and a child of Manoel Fachina's.
 1302. Had you been to see any sick people before you were taken ill?—Yes, I assisted to carry Luis Pathi from Moradinha, and was seized with fever soon after.
 1303. How many were there in your house?—Myself, mother and sister.
 1304. Who was first attacked in your house?—Myself and my mother on the same day, and very soon after, my sister.
 1305. Had your mother seen any sick besides yourself?—I am not sure, but I think not.
 1306. How long were you ill?—Three days I had high fever.
 1307. How long was your mother ill?—Six days.
 1308. And your sister?—Four or five days.
 1309. You all recovered?—Yes.
 1310. Did many come to see you when you were ill?—Maria Chileco, and some others came to see us; they all got sick afterwards.
 1311. Have you ever been on any of the other islands?—No.
 1312. Have you in general had good health?—Yes.
-

Jose Marques, mulatto, native of Boã Vista, aged 62, examined.
(Cabeçada.)

This man had nothing to do with the "Eclair," but his evidence is taken, as he lives near Luis Pathi, and was brother to Joaquim Marques, who died of fever in Cabeçada.

1313. Were you at Cabeçada when the fever broke out there?—Yes, I was.
 1314. When did the first case show itself in Cabeçada?—There was no fever in Cabeçada until Luis Pathi came, or rather was brought from Moradinha.

1315. What had Luis Pathi been doing at Moradinha?—He was attending the Festa of Santa Cruz.

1316. Did you see him when sick at Cabeçada?—Yes, I saw him and all his family when they were ill.

1317. What did his wife and children complain of?—They all vomited blood and black stuff before they died.

1318. Did many people go to see them?—Yes, my late brother Joaquim and a great many others saw them.

1319. When was your brother Joaquim laid up?—Shortly after Luis Pathi's children died.

1320. Did you attend your brother during his illness?—I saw him occasionally.

1321. Have you had fever?—Yes, and all my family, amounting to six persons.

1322. When were you attacked?—Only a short time after my brother died.

1323. Had any of your family been on board the "Eclair"?—Yes, I had two sons employed on board as labourers.

1324. How long was Joaquim ill?—Seven days.

1325. What did he complain of before he died?—Vomiting blood and black matter.

1326. Did your own family all recover?—Yes.

1327. Do you know who first died in Cabeçada?—Manoel Fachina's child.

1328. You have always slight fever prevailing in Rabil during and after the rains?—Yes, very little, and few people die from it.

1329. During some years a good many have died?—Yes, in 1827 several died.

1330. Also in 1821?—I do not know, I was then in England.

1331. Have you in general had good health?—Yes, very much so.

PART IV.

Contents.

Lists of men who were employed at the Coal-Heap on the Small Island, while Her Majesty's ship "Eclair" was at Boã Vista—

1. From Estacia—Joao Gallego.
2. Rabil—Cabeçada.

With the evidence of the survivors.

3. Evidence of Dr. Almeida.

LIST of the Men who were employed at the Coal-Heap on the Small Island, while Her Majesty's ship "Eclair" was at Boã Vista.

| Names. | Country. | Ages. | How long on Island. | If on board "Eclair" or at Fort. | If attacked with Fever, and when. | Result. |
|-----------------------------|----------------|-------|---------------------|----------------------------------|-----------------------------------|------------|
| From <i>Estacia</i> :— | | | | | | |
| Serafin Santos | Mulatto native | 23 | 5 days | Neither. | Nov. 1845 | Recovered. |
| Narcisso Soares | Negro native | 25 | Ditto | Ditto | End of Oct. | Ditto |
| Raimond Balthazar .. | Ditto | 29 | 6 days | Ditto | When Fever was general. | Ditto |
| Pedro Joao Delgado .. | Ditto | 20 | Ditto | Ditto | Ditto | Ditto |
| Serafin da Rocha, 2nd .. | Ditto | 21 | Ditto | Ditto | Ditto | Ditto |
| From <i>Joao Gallego</i> :— | | | | | | |
| Parfeiro da Silva .. | Ditto | 28 | Ditto | Ditto | When Fever was common. | Ditto |

Serafin Santos, mulatto, native of Boã Vista, aged 23, examined.

1332. How long were you employed at the coal-heap on the island?—Five days.

1333. Did you go on board the "Eclair?"—No.

1333a. Or to the Fort?—No.

1334. Where did you go to at night?—To Porto Sal Rey.

1335. Did you go home to Estacia immediately the ship sailed?—Yes, the same evening.

1336. Have you had fever?—Yes, I have had the fever twice.

1337. When had you the first attack?—I do not know the time; but some people had died at Estacia; among them Justinian da Britho.

1338. When had you the second attack?—I was ill about eight days, and there was an interval of another week in which I was well, and was then again attacked.

1339. How long were you ill the second time?—Only three days.

1340. Had you been among sick people before you were taken ill?—No, I had not been inside any of the houses where there were sick people; but they were all around me.

1341. Did any one take sick in your own house?—Yes, my mother and my two brothers.

1342. Had they been with sick people?—No, they had not been with any one besides me.

1343. Did they recover?—My mother recovered, but my brothers both died.

1344. Have you in general had good health?—Yes.

1345. Who was the first taken ill at Estacia?—Joao Chico Fernandez.

Narcisso Soares, negro, native of Boã Vista, aged 25, examined.

1346. How long were you employed working on the island where the Fort is when the "Eclair" was here?—Five days.

1347. Did you return to Estacia when the vessel sailed?—Yes, I did.

1348. Were you at all on board the "Eclair" or at the Fort?—No.

1349. Have you had the fever?—Yes.

1350. When had you the fever?—I was sick very soon after Joao Chico Fernandez, and he was, I believe, the first person taken ill at Estacia. It was, I think, three days after I saw him that I was attacked, and Justinian da Britho was ill at the same time.

1351. How long were you unwell?—Nearly a month.
 1352. How many were there in your house?—My wife and two children.
 1353. Were you all attacked?—Yes, first myself, next my wife, and then the children.
 1354. Did any of those who visited you during your illness get fever?—Yes, several of them; Antonio Maria and others.
 1355. Have you in general enjoyed good health?—Yes.
-

Raimond Balthazar, negro, native of Boã Vista, aged 29, examined.

1356. How long were you employed at the small island while the “Eclair” was here?—Six days.
 1357. Were you inside the Fort, or on board the “Eclair”?—No, I was not at either.
 1358. Have you had the fever?—Yes.
 1359. When had you the fever?—Many in Estacia were attacked before I was.
 1360. Had you been among the sick?—Yes, I had seen nearly every one in Estacia who had been sick.
 1361. How many were there in your house?—My father, mother, and three brothers.
 1362. Who was first attacked?—First myself, and then the others, all about the same time.
 1363. Did you all recover?—Yes.
 1364. Have you in general had good health?—Yes.
-

Pedro Joao Delgado, negro, native of San Antonio, aged 20, examined.

1365. How long were you employed on the small island while the “Eclair” was here?—Six days.
 1366. Were you on board the ship?—No.
 1367. Have you had fever?—Yes, but Justinian da Britho, Joaquina, a woman, and some others were attacked before I was.
 1368. Did you visit any of the sick people?—Yes, I saw Chico Fernandez and several others.
 1369. Who was first taken sick in Estacia?—I am not sure, but I think Justinian was; Chico Fernandez, I am aware, was ill very nearly as soon as he was.
 1370. What did they complain of?—First of pains of head and back; could make no water; and at last black vomit.
 1371. How many are there in your house?—There are my mother, father, one brother, and one sister.
 1372. Were you all attacked?—Yes.
 1373. You all recovered?—Yes.
 1374. How long were you ill?—Three weeks.
 1375. Have you in general had good health?—Yes.
-

Serafin da Rocha, 2nd, negro, native of Boã Vista, aged 21, examined.

1376. How long were you at the coal-heap on the small island while the “Eclair” was here?—Six days.
 1377. Did you go on board the ship?—No.
 1378. Or to the Fort?—No.
 1379. Have you had fever?—Yes.
 1380. When?—After several others; I had seen Libania, Chico Fernandez, and other sick persons.
 1381. How long after you saw them was it that you were taken ill?—Six days.
 1382. How long were you ill?—Fifteen days.
 1383. How many were there in your house?—Nine persons.

1384. Were they all taken ill?—Yes, they all recovered.

1385. What did you complain of?—Hot skin, headache, and vomiting, but no black vomit.

1386. Have you, in general, enjoyed good health?—Yes.

Parfeiro da Silva, negro, native of Boã Vista, aged 28, examined.
(Joao Gallego.)

1387. How long were you employed at the coal-heap on the small island while the “Eclair” was here?—Six days.

1388. Did you go up to the Fort or on board of the ship?—No, I did not go to either.

1389. Have you had the fever?—Yes, and my family also.

1390. When and where were you attacked?—I was taken ill in Porto Sal Rey, at the time many were laid up.

1391. Did you visit any people who were sick?—Yes, a great many.

1392. How many are there in your family?—My wife and three children.

1393. You all recovered?—Yes.

1394. Have you and your family in general had good health?—Yes.

LIST of Labourers who were employed on the small island at the coal-heap, while Her Majesty's ship “Eclair” was at Boã Vista.

From RABIL—CABECADA.

| Names. | Country. | Age. | How long on the Island. | If on board “Eclair,” or at the Fort. | If attacked with Fever, and when. | Result. |
|----------------------------|---------------------|------|-------------------------|---------------------------------------|-------------------------------------|-----------|
| Gabriel Braz | Negro native | .. | 5 days | Neither | When fever was general in Cabeçada. | Recovered |
| Francisco Antonio Ascensao | Do. | 18 | 2 „ | Do. | Not attacked | |
| Simaó Fachina | Mulatto native | 42 | 6 „ | Do. | When fever was general. | Do. |
| Antonio Julio da Graça .. | Do. | 43 | 5 „ | Do. | Do. | Do. |
| Christophe Pinheiro .. | Dark mulatto native | 45 | 5 „ | Do. | Do. | Do. |
| Silvesta da Silva Marques | Do. | 19 | 6 „ | Do. | Oct. 1845 | Do. |
| João da Silva Marques .. | Do. | 20 | 6 „ | Do. | Dec. 1845 | Do. |
| Antonio Fortes | Negro native | 35 | 6 „ | Do. | Nov. 1845 | Do. |
| Pedro Boãvista | Do. | 38 | 5 „ | Do. | When fever was general. | Do. |
| Canuta da Graça | Do. | 20 | 6 „ | Do. | Nov. 1845 | Do. |
| Luis Joaquim | Do. | 24 | 5 „ | Do. | When fever was general | Do. |
| Antonio Julio Monteiro .. | Do. | 22 | 5 „ | .. | End of Nov. | Do. |
| Da Silva Benthino .. | Do. | 38 | 5 „ | Do. | When fever was general | Do. |
| Palequino Fernandez .. | Do. | 29 | 6 „ | .. | Do. | Do. |
| Francisco San Antonio .. | .. .. | .. | .. | .. | .. | Died |
| Pedro Gomes .. .. | .. .. | .. | .. | .. | .. | Do. |
| Cosmo da Cruz .. .. | .. .. | .. | .. | .. | .. | Do. |

Gabriel Braz, negro, native of Boã Vista, aged , examined. (Cabeçada.)

1395. Were you employed on the island where the Fort is when the sick of the "Eclair" were there?—Yes, I was five days on the island when the sick were at the Fort.

1396. Did you go on board the "Eclair"?—No.

1397. How were you employed on the island?—I was carrying coals from the coal-heap to the launches.

1398. Did you go up to the Fort among the sick?—No.

1399. Were you at all among the sailors of the "Eclair"?—Yes, I saw them a good deal on the island.

1400. Have you had fever?—Yes, but not until fever was general at Cabeçada.

1401. Do you know any one who was sick at Cabeçada before you were?—I know there were a great many, but I do not recollect names.

1402. Who do you live with?—With my father and mother.

1403. Was your mother taken ill?—Yes, she was attacked before I was.

1404. Had she been much among sick people?—She was daily going to Porto Sal Rey with water; but I do not know whether or not she called to see any sick people.

1405. How long was she ill?—Eight days.

1406. Was your father attacked?—Yes, he was, while my mother was laid up.

1407. And yourself?—At the same time.

1408. Did you all recover?—Yes.

1409. Have you in general had good health?—Yes.

Francisco Antonio Ascensao, negro, native of Boã Vista, aged 18, examined. (Cabeçada.)

1410. How long were you employed on the small island while the "Eclair" was here?—Two days.

1411. Were you at all on board the ship?—No.

1412. How were you employed on the island?—Carrying coals from the coal-heap to the boats.

1413. Were you at the Fort?—No.

1414. Were you at all among the "Eclair's" people?—Very little.

1415. Have you had fever?—No.

1416. With whom do you live?—With my father, mother and sister.

1417. Have they been sick?—No, none of them.

1418. Then were you in Cabeçada while the fever was prevailing there?—No; we all went into the country to a house called Bella Vista, about three miles to the eastward of Porto Sal Rey.

1419. How long did you remain there?—We are there still.

1420. Have you seen any sick people?—Yes, I have: I took goats to the house of Matthew Soares da Graça at Cabeçada, and he was then sick. I stopped one night under the same roof with him, but in a different room.

1421. Did none of the others of your family see sick people?—None of them.

1422. And they all escaped the fever?—Yes, all have escaped.

Simao Fachina, a mulatto, native of Boã Vista, aged 42, examined. (Cabeçada.)

1423. You were employed on the small island when the "Eclair" was here?—Yes, I was six days employed on the island while the "Eclair" was here.

1424. Were you ever at the Fort?—No.

1425. Nor on board the ship?—No.
 1426. Were you taken ill with fever?—Yes, but not until many had died from fever in Cabeçada.
 1427. Have you a family?—Yes, I have a wife and six children.
 1428. Have they had fever?—Yes, all of them.
 1429. Did they all recover?—Yes, all recovered.
-

Antonio Julio da Graça, native of Boã Vista, aged 43, examined.
 (Cabeçada.)

1430. How long were you employed on the island while the “Eclair” was here?—Five days.
 1431. Were you ever on board the ship?—No.
 1432. Were you at the Fort?—No.
 1433. How were you employed on the island?—I was employed at the coal-heap, and in carrying coals down to the launches.
 1434. You went to Rabil every night when you were so employed?—Yes, every night.
 1435. Have you had fever?—Yes.
 1436. When had you the fever?—Not until a great many in Cabeçada were sick.
 1437. Do you know who was the first person taken ill with fever in Cabeçada?—I believe it was Luis Pathi.
 1438. What family have you?—A wife and five children.
 1439. Were they attacked?—Yes, all of them.
 1440. Did you and your wife visit sick people?—Yes, both of us.
 1441. Did you all recover?—Yes.
 1442. Have you in general enjoyed good health?—Yes.
-

Christophe Pinheiro, dark mulatto, native of Boã Vista, aged 45, examined.
 (Cabeçada.)

1443. How long were you employed at the coal-heap on the small island while the “Eclair” was here?—Five days.
 1444. Were you ever on board the ship, or did you go up to the Fort?—Neither the one nor the other.
 1445. Were you at all among the healthy sailors of the “Eclair”?—Yes; now and then they came down.
 1446. Have you had fever?—Yes.
 1447. At what time had you the fever?—I think it was some time early in November.
 1448. Did you see Luis Pathi?—Yes, I did; I live near to him.
 1449. How many are there in your house?—My wife and five children.
 1450. Who was first attacked?—My wife; she was in childbed at the time; she was taken with fever.
 1451. Had she seen any sick people?—No; but I had, and I had also buried fever corpses.
 1452. Had the rest of the family the fever?—Yes, it passed through the whole of them slightly: they all recovered.
 1453. Did many people visit you?—Yes.
 1454. Have you ever been off the island?—Yes, I have been to St. Jago and Fogo.
 1455. Have you ever had fever at St. Jago.—No.
 1456. Have you in general had good health?—Yes.
-

Silvesta da Silva Marques, mulatto, native of Boã Vista, aged 19,
examined. (Cabeçada.)

1457. How long were you at the small island during the stay of the "Eclair" at this place?—Six days.

1458. Were you ever on board the ship or at the Fort?—I was not at either.

1458a. Have you had fever?—Yes.

1459. When were you attacked?—At the same time with Joaquim Marques and his family.

1460. Then were there many sick people in Cabeçada at this time?—Yes, many.

1461. Had you visited any sick people before you were taken ill?—No.

1462. How many are there in your house?—My father, mother, and four children.

1463. Who was first attacked in the house?—A brother of mine called Antonio.

1464. Had he seen sick people?—Not that I know of.

1465. You had a brother who also worked on the island at the coal heap?—Yes; he was also taken ill and myself the same day.

1466. Did you all recover?—Yes.

Joao da Silva Marques, dark mulatto, native of Boã Vista, aged 20,
examined. (Cabeçada.)

1467. Are you the brother of Silvesta da Silva Marques?—Yes, I am.

1468. How long were you employed in the small island?—Six days.

1469. Were you ever on board the ship or at the Fort?—No.

1470. Have you had fever?—Yes, I have.

1471. When were you attacked?—Very shortly after Luis Fortes Pathi.

1472. Do you live near him?—Yes.

1473. How many are there in your house?—My father, mother, and three brothers and one sister.

1474. Who was first attacked?—My brother, who is called Antonio.

1475. Had he been among sick people?—I do not know.

1476. How long was he ill?—Only two days.

1477. Who was next attacked?—My brother Silvestion and myself, the same day; my father and mother also had fever; but all recovered.

1478. Have you, in general, had good health?—Yes.

Antonio Fortes, negro, native of Boã Vista, aged 35, examined.
(Cabeçada.)

1479. How long were you employed on the island?—I was six days at the coal-heap.

1480. Were you ever on board the "Eclair" or at the Fort?—No, never at either.

1481. Did you go among the healthy sailors on the island?—Yes, they often came down to the coal-heap.

1482. You returned to Rabil every night?—Yes.

1483. Have you had fever?—Yes, I have.

1484. When had you the fever?—In November last.

1485. How many are there in your house?—A wife and two children.

1486. Had you all fever?—Yes, I was first attacked, then my wife, and afterwards the children.

1487. Did they all recover?—Yes, all of them.

1488. Have you in general enjoyed good health?—Yes.

Pedro Boã Vista, dark mulatto, native of Boã Vista, aged 38, examined.

1489. How long were you employed on the small island while the "Eclair" was here?—Five days.
 1490. Were you ever up at the Fort?—No.
 1491. Nor on board the "Eclair"?—No.
 1492. Have you had fever?—Yes, and all my family of five persons.
 1493. When had you and your family the fever?—Not until fever was general at Cabeçada.
 1494. Had you visited sick persons?—Yes, I had seen Luis Pathi, Joaquim Marques, and many others. I live in that part of the town where the sickness was greatest at the first.
 1495. Did all in your house recover?—Yes.
 1496. Who was first sick in Cabeçada?—Luis Pathi.
 1497. Have you ever had slight fever which prevails at Rabil during or after the rainy season?—No, but I have known people to have that fever; it does not last long, and very few die.
 1498. You have that fever prevailing in Rabil every year?—Very little indeed, and not every year.
-

Canata da Graça, dark mulatto, native of Boã Vista, aged 20, examined.
 (Cabeçada.)

1499. How long were you employed on the small island while the "Eclair" was here?—Six days.
 1500. Did you ever go up to the Fort or on board the ship?—Neither to the one or the other.
 1501. Did you go to your home at Rabil every night?—Yes.
 1502. Have you had fever?—Yes, but not until November, when a great many were sick.
 1503. How many are there living in your house?—My mother and three brothers.
 1504. Were they attacked?—Yes.
 1505. Had you or they been among sick people?—Yes, all of us had been to see most of the people who had been sick in Rabil.
 1506. Did they all recover?—Yes.
 1507. Have you and they, in general, had good health?—Yes, always until we had the fever lately.
-

Luis Joaquim, negro, native of Boã Vista, aged 24, examined.
 (Cabeçada.)

1508. How long were you employed on the small island while the "Eclair" was here?—Five days.
 1509. Were you ever on board the ship or at the Fort?—No, I was not at either.
 1510. You went to Rabil every night?—Yes.
 1510a. What family have you?—A wife and two children.
 1511. Have they had fever?—Yes, they all recovered.
 1512. Who was first attacked?—Myself, and then my wife and the children.
 1513. Had you been among sick people?—Yes, I had seen almost all that were sick before me in Rabil.
-

Antonio Julio Monteiro, negro, native of Boã Vista, aged 22, examined.
 (Cabeçada.)

1514. You were employed some time at the coal-heap on the small island while the "Eclair" was here?—Yes, I was five days so employed.

- 1514a. You went home to Rabil every night?—Yes.
 1515. How many are there in your house?—My father, mother, grandmother, and four brothers and sisters.
 1516. Were you attacked with fever?—Yes.
 1517. Who in your house was the first attacked?—My father, José Angela. He was taken ill about the 27th of November.
 1518. Was your mother attacked?—Yes; and myself and children in succession; next my grandmother.
 1519. Did you all recover?—No, my grandmother died.
 1520. Had you and your family been among the sick people?—Yes, a great deal.
 1521. Have you in general had good health?—Yes.
-

Da Silva Benthino, negro, native of Boã Vista, aged 38, examined.
 (Cabeçada.)

1522. How long were you employed on the island where the Fort is?—Five days.
 1523. Did you go up to the Fort or on board the “Eclair” on any occasion?—No.
 1524. Have you had fever?—Yes, but not until Joaquim Marques and some others had it.
 1525. How many persons are there in your house?—My mother, wife, niece and myself.
 1526. Were they all attacked with fever?—Yes; first my mother, next my wife, then my niece and myself about the same time.
 1527. Had your mother been among the people who were sick?—Yes.
 1528. Did you all recover?—No, my niece died.
 1529. Had she attended the others in the family who were sick?—Yes, all of the others.
 1530. Have you always had good health until lately?—Yes.
 1531. Have you been at any of the other islands?—No, I never was away from this island.
-

Palequino Fernandez, negro, native of Boã Vista, aged 29, examined.
 (Cabeçada.)

1532. How long were you employed on the small island?—I was at the coal-heap six days.
 1533. Have you had fever since the time you were on the island?—Yes.
 1534. How many are there in your house?—My father, mother, and three brothers.
 1535. Were they all attacked with fever?—Yes; first my father, then my mother, then my brothers, and last myself.
 1536. Did you all recover?—Yes.
 1537. How long was each of you ill?—From three to eight days.
 1538. When was your father attacked?—Not until many had died in Cabeçada.
 1539. Have you in general had good health?—Yes.
-

Dr. Hypolito José Xavier d'Almeida, native of Portugal, aged , examined.

1540. How long have you been on this island?—Thirty-seven years.
 1541. During that time what fever have you known to prevail here?—I have known intermittent and remittent fevers to occur here after the rains.

1542. You mean on the island generally?—No, only on the banks of the Rabil ravine.

1543. But you have seen remittent fever at Porto Sal Rey?—I never knew a single case of either remittent or intermittent fever to originate at Porto Sal Rey; people who have got remittent at Rabil, have often come to Porto Sal Rey to get well.

1544. Then do you mean to say that remittent fever is confined to the Rabil ravine?—Yes, I do.

1545. Then at what time of the year does the Rabil fever occur?—It does not occur every year, in fact we have not had it for the last four years; when I say this, there may have been one or two cases, but they were of so trifling a nature that I never heard of them. Remittent never appeared before September, October, or November, and not after January and February.

1546. What months are comprehended in the term rainy season?—August, September, and part of October.

1547. Can you tell me when the rainy season began, and ended last year?—Some rain fell in August, and it continued until the middle of October.

1548. Was there more rain last year than usual?—No, I think not. I have seen many seasons in which there was much more rain than there was last year.

1549. The visitations of remittent have been severe here, during some seasons. Can you tell me in what years they occurred?—In 1821-22, 1827, and 1833.

1550. What was remarkable in the state of the weather during those years?—Nothing, that I am aware of.

1551. Have you any idea of the rate of mortality during the years you have mentioned; I mean from remittent alone?

| | |
|---------------------------------------|----|
| In 1821-22 there died about | 33 |
| In 1827 | 13 |
| In 1833 | 15 |

1552. Did the deaths all take place at Rabil?—Nearly all. Some went away and died in the other villages, but very few.

1553. Was there no remittent fever in Porto Sal Rey during these years?—None, not a case.

1554. Were you here when Her Majesty's ship "Eclair" arrived in August last?—No, I was then at the Island of Sal, but I came here four days after her arrival.

1555. How long had you been at Sal?—Two months.

1556. Was Sal quite healthy when you left it?—Yes.

1557. What was the state of health on this island when you arrived from Sal?—With the exception of the people of the "Eclair," there was general health throughout the island.

1558. You were, I understand, requested to see the people of the "Eclair"?—Yes, I was requested by the Governor to go to the Fort and see the sick of the "Eclair" there.

1559. How did they seem to be lodged there?—They seemed to be extremely crowded. I could hardly pass between them. In one small room there were about twelve sick persons.

1560. How many sick were there altogether when you visited them at the Fort?—I should say about thirty, if not more.

1561. What was the disease with which the crew of the "Eclair" were at this time affected?—Yellow fever.

1562. Have you ever seen this disease before at Boã Vista?—Never.

1563. Did you return to your house in Porto Sal Rey after paying this visit?—Yes, I did.

1564. Did you go to the Fort a second time?—No, shortly after this I went to Fundo das Figueiras, on the north side.

1565. How long did you remain at Fundo das Figueiras?—I remained there until the 19th or 20th of October, when I heard that fever had appeared in Porto Sal Rey, upon which I returned to Porto Sal Rey, where I found about twenty people sick.

1566. Did you see any of them?—Yes, in all about 150.

1567. What was the nature of their disease?—The same fever as that which the crew of the “Eclair” laboured under when I saw them at the Fort.

1568. You are quite sure it was the same kind of disease?—Yes, quite sure. It was in some cases in a degree modified by the patients being black or white.

1569. In your practice how long did the disease last,—I mean the fatal cases?—From three to seven days.

1570. What proportion of the inhabitants was attacked?—I should say more than two-thirds.

1571. How long did you remain in Porto Sal Rey?—Until the 30th of October.

1572. Where did you go to then?—To my country-house at Boã Esperança, about a mile and a-half from Porto Sal Rey.

1573. How long did you remain at Boã Esperança?—I was there until the 19th of November, when I removed with my family, amounting with slaves to 56 persons, to Fundo das Figueiras.

1574. Did you find any sick at Fundo das Figueiras?—No. But it was said that one man had been sick. In a few days after I got there, a man called João Baptista da Cruz came from Rabil, and was taken sick in the course of a few days; in a week or ten days after this, his mother and sister were taken ill, and both died. However I got sentinels placed on each side of Fundo das Figueiras, and prohibited communication with João Gallego and Cabeça dos Tharafes, in both of which places fever was raging. I also put the sick into one house, and kept the same nurses always with them. By these means I kept the fever under until the middle of December.

1575. How long then, do you think, did the segregation of the sick and the sanitary cordon you formed prevent the spread of the disease?—At least three weeks.

1576. But how did the fever get to Fundo das Figueiras after all your precautions?—A man called Antonio José, whose sister was at the time dying from fever, came from João Gallego. He was taken ill in a house where he had gone to, and continued there.

1577. In which of the three eastern villages did fever first appear?—In Cabeça dos Tharafes, and the first person attacked was a little girl called Aniceto.

1578. About what time was this?—Late in October, I believe.

1579. When did the fever appear in João Gallego?—Early in November; the first sick there were two soldiers who came from the barracks in Porto Sal Rey, where fever was raging.

1580. When did you leave Fundo das Figueiras?—On the 23rd of December.

1581. Was there much fever at this time?—Yes, there were a good many cases.

1582. Where did you go to?—To Boã Esperança.

1583. What treatment did you find to answer best during the late fever?—Cupping; local bleeding was generally beneficial; general bleeding was rarely adopted; blisters, enemata, and saline purges.

1584. Did you not give mercury?—No.

1585. What reasons have you for supposing that the fever was contagious?—Because, as a general rule, all those who visited fever patients caught fever; while all those, and there were many, who went into the country, away from patients, were never attacked.

1586. But still, notwithstanding the segregation of the sick and the establishment of a sanitary cordon at Fundo das Figueiras, fever at length broke out there?—Yes. But the means I had at command, both for segregation of the sick and the prevention of intercourse with the infected towns, were very imperfect; and on this account the man Antonio José came undiscovered from João Gallego.

1587. Then do you think the fever was propagated from the house of Antonio José?—Certainly. By those who attended him.

1588. Did he recover?—No.

*Relative to the State of Health on the other Islands of the Cape de Verds Group.**Dr. Deas to Dr. Mc William.*

Monsieur,

Ile de Saint Nicolas, 31 Mars, 1846.

EN réponse à la question que vous m'avez adressée ce matin, j'ai à vous répondre que je ne connais aucun fait qui prouve qu'il y ait eu dans cette île ou dans les autres de cet archipel aucun cas de fièvre jaune, excepté dans l'Ile de Boã Vista où elle paraît maintenant.

Ici il y eu quelquefois des fièvres endémiques et épidémiques, mais elles ne présentaient pas les symptômes qui caractérisent celle qui désolé actuellement Boã Vista.

Depuis mon arrivée d'Europe (il y a déjà neuf ans) je n'ai pas eu l'occasion d'observer aucun cas de ces fièvres, parceque heureusement nous en avons été libres; par conséquent je ne puis pas affirmer si elles étaient ou non contagieuses; cependant l'opinion générale, joint à quelque souvenir que j'en ai conservé, me portent à croire qu'elles ne l'étaient pas, sans que toutefois je puisse vous informer à quelle classe elles appartenaient.

Agréez, &c.

(Signé)

J. J. DIAS, D.M.P.

PART V.

General Remarks.

Her Majesty's steam-vessel "Eclair" arrived at Boã Vista, one of the Cape de Verd Islands, from the west coast of Africa, on the 21st day of August, 1845.

Her crew were then still suffering from fever, which first appearing early in the previous June, when the vessel was stationed at the mouth of the Sheabar River, had again broken out after she had proceeded to Sierra Leone, and remained there for some time. Here the crew, in addition to other duties, were employed in cleaning out the hold of the "Albert" steam-vessel, which had been engaged in the Niger Expedition, as well as that of their own vessel, and afterwards were allowed to go on shore during the period of the rains. Many stopped till it was late; several slept on shore for some nights; some were brought in from the country by the police; and six or seven deserted altogether, and were no more heard of.

Leaving Sierra Leone after a stay of eighteen days, the "Eclair" stood to the northward, with the "Albert" in tow, and anchored at a considerable distance from the shore, where both vessels remained from the 28th of July to the 8th of August; upwards of twenty of "Eclair's" men being in the meantime still engaged on board the "Albert," cleaning and in other ways preparing that vessel for the service of the Government at the Gambia.

The "Eclair" went into the Gambia on the 10th of August, and having delivered up the "Albert" to the authorities there, left on the 15th of the same month. On her way to Boã Vista, she called at Goree to deliver despatches, and obtained a small quantity of coals*; but the Government there did not consider it proper, under the circumstances of her sickly condition, to permit further intercourse with the shore.

Meanwhile the fever was steadily gaining ground; for, in addition to those who were on the sick list when the vessel left Sierra Leone, three of the men who had slept on shore there were attacked with fever, and died. A merchant from Sierra Leone, who was taking a passage, also died of fever on the 27th July; and fifteen new cases were added in

* The launches with the coals were towed by the Goree people to within a short distance of the "Eclair," and were then picked up by her crew.

August, before the vessel reached Boã Vista (on 21st August), of which seven were eventually fatal.

Immediately the "Eclair" anchored at Boã Vista, the British Consul sent a boat off to her; but when this boat reached the vessel, Captain Estcourt (in all probability with the fact of his being refused pratique at Goree still fresh in his memory, and desirous to act with prudence) declined having any communication with her, and stated that there were several cases of fever in the ship, which might possibly subject her to quarantine.*

The boat upon this returned to the shore, and Captain Estcourt wrote a full and detailed account of the state of his ship to Mr. John Rendall, Her Majesty's Consul, which was immediately communicated to his Excellency the Governor-General, at the time residing at Boã Vista; and as there was no Portuguese medical man then on the island, Mr. Kenny, the English surgeon, was commissioned by the Governor-General to inquire into the nature of the disease prevailing on board the "Eclair." Mr. Kenny accordingly proceeded on board the "Eclair," and after communicating with the medical officers of the ship, and looking at several of the sick, returned to the shore and reported that the disease in the "Eclair" was the common endemic fever of the African coast, which was not of a contagious or infectious nature.*

Upon this representation, the authorities at Boã Vista without further hesitation at once granted the "Eclair" free intercourse with the shore. The Captain and first engineer landed the same afternoon; and John Jamieson, the Consul's storekeeper, accompanied the engineer on board in the evening, and brought on shore with him several bags of soiled linen, which he deposited for the night in one of the Consul's storerooms, and the next day distributed them among the washerwomen of the town.†

Shortly after the ship was at Boã Vista the crew were again employed removing tanks, clearing holds, &c.

On the 25th August, the whole of the sick were moved into the captain's cabin, and Captain Estcourt went to live at the house of Mr. Macaulay, Her Majesty's Commissioner Judge of the Mixed Commission Court at Boã Vista.

The number of fever cases continuing to increase, it was next judged advisable to try the effect of removing them to the shore; and the Governor-General having, the moment he was made aware of this intention, in the most prompt and handsome manner placed a fort situated on a small island at the entrance of the harbour, at the disposal of Captain Estcourt, for the use of the sick, they were all landed there on the 31st of August‡. The healthy portion of the crew were also lodged within the walls of the Fort, but in apartments separate from those of the sick.

This small island lies in a direction about south-east and north-west, within the northern extremity of an extensive bay on the western side of Boã Vista, and is about half a mile distant from Porto Sal Rey, the chief town of that island. It is rather less than a mile in length, and under a quarter of mile in its greatest breadth; and is composed of a basaltic base with a calcareous incrustation on the surface. On the north-eastern side the rock rises to the height of about fifty feet, with a tendency to the tabular form, and of a distinctly columnar structure. Towards the north-western end it gradually shelves down to the sea, and is margined by a conglomerate of broken and rounded fragments of basalt, pieces of coral and shells, held together by a calcareous sandstone. The Fort Duke of Braganza stands upon a bare hill of basalt, from forty to fifty feet above the sea level, near the southern end of the island. The whole building is in a state of disrepair, if not of dilapidation. The court-yard is ninety-three feet long and fifty feet broad. Some sheds and huts in a ruinous state extend along each side of the yard, and were, I believe, assigned to the healthy part of the crew. The house in which the sick were lodged consists of two floors. The upper floor which contains one room sixteen feet square, and two others exactly half that size, is well provided with windows, and

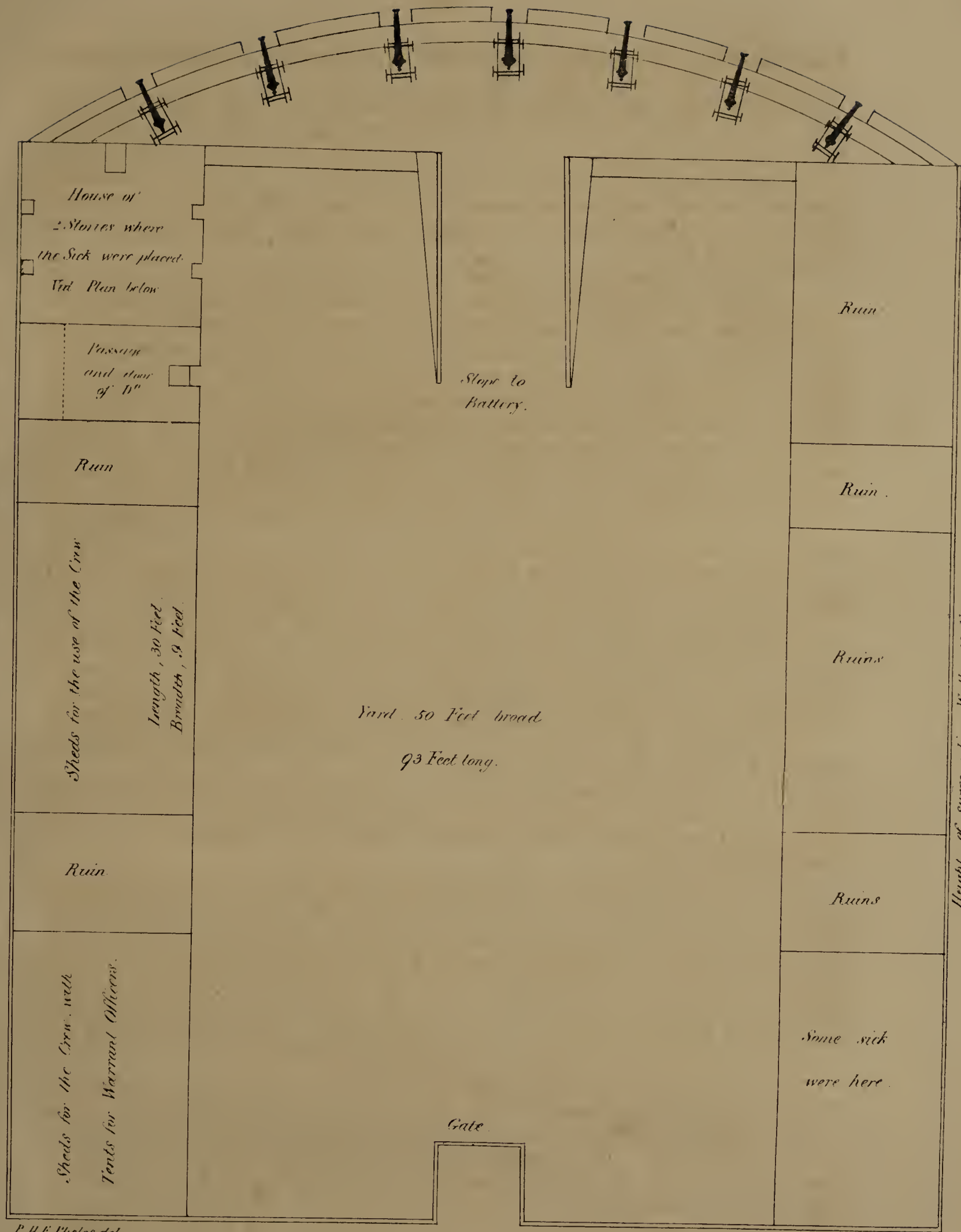
* Vide Question 4.

† Vide Question 5.

‡ Dr. Stewart's Report. Mr. Macaulay says it was on the 28th August.

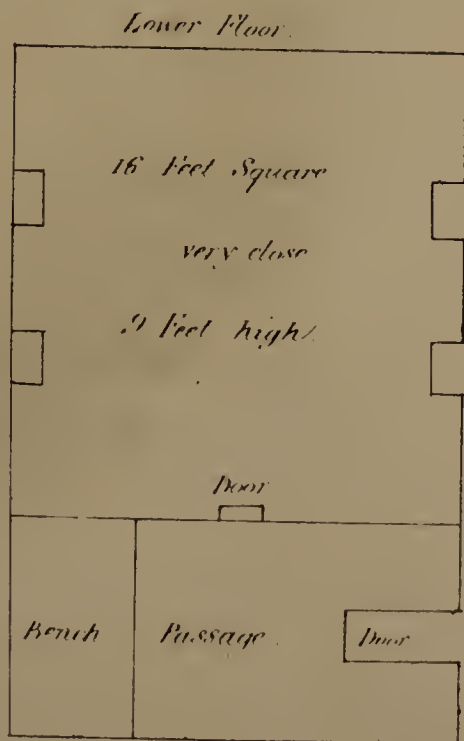
Plan of Fort Duke of Cornwall

On the Small Island off the Island of Boa Vista where the Sick were landed from the FRIGATE Steamer, in September, 1845.



P.H.F. Phelps del

Plan of House given over to the Sick.



Height of Surrounding Walls 12 Feet

is exposed to the breeze. The under floor is of the same dimensions as the upper one, but is somewhat differently arranged; that part corresponding to the small upper rooms, forming a passage to the larger room, which here has only one small window opening to the wall of the steps leading to the rampart.

The whole of this lower floor is close, hot, and miserably ventilated.

The disease did in no degree abate after the sick were in the Fort; on the contrary, it seemed daily to acquire fresh virulence. On the 8th September, Mr. Charles Hartman, assistant surgeon, died, and was replaced by a volunteer, Mr. Charles Coffey, assistant surgeon of Her Majesty's ship "Growler," which ship had two days before arrived at Boã Vista from the coast of Africa. The unremitting attention of Mr. Hartman to his sick shipmates, which ceased not until within a short period of his death, had justly endeared him to all on board. At the same time Dr. Maclure, a naval surgeon who had just been promoted, and was thus far on his way home as a passenger in the "Growler," with noble devotion, proffered his services to relieve Mr. Maconchie, the surgeon of the "Eclair," now almost worn out by constant attendance upon the sick.

On the 11th September, Captain Estcourt, whose whole time had been engaged in cheering, consoling, and supporting his sick crew, was himself taken ill, and at once conveyed to the Fort.

The "Eclair" had been now just three weeks at Boã Vista, and the disease, instead of being checked, as had been hoped, was daily gaining strength—not less than sixty fresh cases had in this short period been added to the sick list, and some deaths had taken place nearly every day.

With appearances so formidable, Captain Buckle, of the "Growler," directed a consultation of the medical officers to be held on the state of the crew of the "Eclair," which resulted in their recommending that vessel to proceed to Madeira, and in the event of no material improvement taking place by the time she arrived there, to go on to England. The whole of the sick were therefore re-embarked on the afternoon of the 13th September, and the same evening the "Eclair" in company with the "Growler" sailed from Boã Vista.

It is now time to take into consideration the occurrences that took place while the "Eclair" was at Boã Vista, with reference to the intercourse that existed between the inhabitants and the ship, the officers living at Porto Sal Rey, and the sick as well as the healthy part of the crew, while they were at the Fort. Before, however, entering upon this the most important part of the report, it may be well to give a brief sketch of the more prominent features of the island, reserving the details relative to the towns until the progress of the fever comes to be discussed.

Boã Vista, the easternmost of the Cape de Verds group, lies in latitude $16^{\circ} 5'$ north, and longitude $22^{\circ} 55'$ west. It is of an irregular pentangular form, indented on all sides by bays, of which that only on the western side is now resorted to by shipping.

The plateau of the island, which rises at the distance of from a quarter of a mile to a mile from the sea, is of an average elevation of about sixty feet above the sea level, and is composed chiefly of sandstone of various degrees of compactness, lying upon a bed of basalt. This disposition of structure is beautifully displayed at the village of Rabil, and in some of the deep water-course sections on the north-eastern side of the island, where strata of sandstone to the depth of forty feet are seen resting upon the igneous rock underneath. The principal mountain range traverses the centre of the island, from south-east to north-west. On each side of it there are inferior hilly ranges. Mount Ochello on the north-east side, and Píco d'Estacia, or south mountain, on the southern side of the island, have both a greater altitude than that of the highest part of the chief range. By a barometric measurement Píco d'Estacia was found to be 1260.5 feet above the level of the sea.

The whole of the mountains have a capping of basalt, which in many of them, especially on Man Mountain on the west side, is being detached from the top, rolling down the sides in huge masses. The sides of the

mountains are observed variously streaked and coloured by the basalt passing into different stages of disintegration. The north-western part of the island, from the plateau round Pico Reshee, to the base of the north-eastern extremity of the mountain range (with the exception of an undulating elevated hilly belt on the windward side) is comparatively low and flat, and almost wholly occupied by sand, which, blown up from the north-eastern shore through the water-courses and other hollows, accumulates in mounds twenty and thirty feet high, which are driven about and shifted by every little variation of the direction of the wind.

On the flat, a little to the southward of the Saltpan, marked in the chart as situated between Porto Sal Rey and Rabil, the sea, when the waves are high, sometimes breaks over the elevated beach, and percolates through the shingle so as to accumulate, and run inland in the form of a narrow creek from 200 to 300 yards from the sea-shore. During the rainy season, this, in common with the other flats on the island, is inundated to a considerable extent, as is evident from the appearance of the soil in those places not covered with sand, as well as by the presence of a rude raised causeway, which the people have constructed over part of the hollow flat, to render it passable during the rains.

On one occasion only while I was at Boã Vista, did the sea extend beyond its natural boundary (in June), and deposit some pools on the opposite side of the beach. Except in this instance, this part of the flat was dry and almost wholly covered with sand, through which a species of *sedum* and clumps of another shrub were struggling for existence.

Except salt, which is produced by the spontaneous evaporation of sea water in pans hollowed out in the soil, the island produces little. A quantity of the *lichen rocella* is I believe occasionally exported. I saw several large herds of bullocks on the southern side of the island; and throughout the whole island the goat seems to abound. In the dry season it seems a matter of wonder how these animals can subsist; for when viewed from one of the mountains there is nothing seen to relieve the uniformly arid and barren aspect of the ground, save in the beds of the water-courses, where occasional cocoa-nut trees and patches of corn in a rude state of cultivation give some token of vegetable life.

The water is generally brackish, and in some places it is difficult to get any fit for use. Good water, however, is obtained at Estacia, near the south-western base of Platform Hill; and Dr. Almeida has an abundant supply for a considerable population, at his country residence, called Boã Esperança, about a mile and a half to the south-east of Porto Sal Rey.

The towns and villages are, first, *Porto Sal Rey*, which stands at the northern end of the bay on the western side of the island.

Rabil, or the New Town of the chart, about four miles to the southward of Porto Sal Rey.

Estacia, *Povoação Velha*, or Old Town, is situated at the south-western base of Platform Hill, about six miles to the south-west of Rabil.

The eastern villages, *João Gallego*, *Fundo das Figueiras*, and *Cabeça dos Tharafes*, are all on the eastern side of the mountain range, the road leading to them being about fifteen miles from Porto Sal Rey.

Besides these, there are several small hamlets which will be afterwards spoken of.

The inhabitants consist chiefly of dark mulattoes of various grades of European intermixture; free and enslaved negroes; with a small proportion of Europeans, principally Portuguese and English.

The male natives are employed in working at the salt-pans, loading vessels, cultivating corn and beans, and occasionally cotton, in the water-courses, fishing, herding goats and cattle, and carrying wood and water to the towns for sale. Unaccustomed to anything beyond the mere necessities of life, their wants are but few, and are generally (except during periods of great scarcity, as of late) within the pale of their own resources. A little fish, some wasted Guinea corn, or a few beans, furnish the ordinary meal.

To return now to the "Eclair."

At the time the crew of the "Eclair" were landed at the Fort, the officers (gun-room midshipmen and warrant) took up their residence at a house in Porto Sal Rey, which had been hired for them by the British Consul. The necessary duties on board the ship were carried on under the superintendence of Mr. (now Commander) Harston, the First Lieutenant. These comprehended clearing the holds, cleaning ship generally, and watering and coaling her.

The first of these duties had been already commenced by the Kroomen of the ship, assisted by two white seamen. The operations of coaling and watering were performed with launches belonging to Mr. George Rendall, and other merchants of the place, manned by mulatto and negro natives. There was at first an understanding with the natives, that they were not obliged to do duty below the upper deck of the ship; nevertheless, of the forty who were employed upwards of a week on board, hoisting in coal-bags and water-casks, several assisted in cleaning, whitewashing and restowing the holds; most of them were, during some period, on the lower deck; and nearly the whole, including the launchmen, were on board the day the ship sailed, and after the sick had returned from the Fort.

There were on board the "Eclair" as labourers—

| | |
|--------------------|----|
| From Porto Sal Rey | 9 |
| Rabil (Cabeçada) | 20 |
| (Boaventura). | 10 |
| Estacia | 2 |

Total . . . 41

The launches were employed between the coal-heap (about 300 yards to windward of the Fort on the small island) and the ship, and between the watering-place, about a mile to the southward of the anchorage, and the ship.

| | |
|---|----|
| In the launches there were from Porto Sal Rey | 13 |
| Rabil (Cabeçada) | 10 |

Total . . . 23

The number of men in the six launches seems small, but the crews were made up as occasion required by the labourers on board the ship. The patrao, or coxswain, of the launches generally went on board the vessel while the boat was being discharged, and sometimes part of the crew did the same*

At the coal-heap on the small island there were as labourers, from

| | |
|------------------|----|
| Rabil (Cabeçada) | 17 |
| Estacia | 5 |
| João Gallego | 1 |

Total . . . 23

The whole of the labourers on board and on shore, as well as the launch-men, went to their respective homes every night, except those from Estacia and the eastern villages, who generally slept at Porto Sal Rey†.

The coal-heap labourers as well as the launch-men mixed freely on the island with those of the "Eclair's" people who were not on the sick list‡; but it does not appear that any of them (with the exception of a slave who afterwards died) visited the rooms where the sick were lying§. Some of them, indeed, went to procure water from a tent near the gate of the Fort, but they never went where the sick were. Dr. Almeida from Porto Sal Rey, visited the sick once, as did also Mr. Kenny more than once, indeed frequently. A native called José Pedro occasionally brought supplies from the country to the crew, and he was very strongly suspected of having smuggled spirits into the Fort. John Jamieson, the Consul's storekeeper, who superintended the launches on shore, and the soldiers of the guard, were the only persons belonging to the island who had daily intercourse with the sick crew.

* Vide Questions 1121, 1169, 1262, 1298.

† Vide examinations of launch-men, &c., passim.

‡ Vide Questions 1399, 1414, 1445, 1481.

§ Vide Questions 1131, 1144, 1170, 1289.

It cannot, therefore, be said that there was much direct intercourse between the people of Boã Vista and the sick at the Fort. The boats that were from time to time sent by the British Consul with supplies from the island were equally careful with the labourers not to enter the Fort; indeed it was for some time in vain that the Consul endeavoured to procure labourers for the "Eclair," such was their dread of the disease with which her crew were affected.

It has been already mentioned that the soiled linen brought from the vessel on her first arrival was given out to be washed by the washer-women of the town. Of these there were not less than seventeen employed washing the linen; and all of them, with the exception of an old negress, were attacked with fever, of which four died*.

I have examined the whole of the survivors, and have found that two were attacked late in October, five in November, two in December, three in January, and one not until some time in February†. None of the deaths took place until fever was general in Porto Sal Rey‡. So that in none of these cases can the occurrence of the fever be fairly attributed, to infectious matter conveyed by the linen.

The house in which the officers lived is situated close to the sea shore in that part of the town of Porto Sal Rey called Santa Barbara; they and their servants were daily in various parts of the town. The purser was for some days in the house of Mr. Kenny, the surgeon, and while there was affected with a nervous disorder. Some of the other officers, the captain's cook, and some other servants, were taken ill at the house in Santa Barbara; but they as well as the purser§ were (in accordance with a stringent rule laid down by Captain Estcourt) sent to the Fort as soon as they were attacked.

Leave was given during the early part of the stay of the "Eclair" at Boã Vista, to the petty officers and a few of the sailors; and a man called Smith stopped in the town two nights. The seamen seemed to have resorted chiefly to the house of a man called Justinian da Silva Georgio, who keeps a spirit-store in Porto Sal Rey. It is remarkable that this man was attacked with headache and general fever on the evening of the day he was visited by the "Eclair's||" people; he was attended by Dr. Almeida and seen by many of his friends during his illness, which lasted a fortnight; amongst the latter were two females, called Anna Gaspar and Rosinha San Antao, both of whom had slight fever shortly afterwards. It is but necessary to mention that both these women had been visited by people from the "Eclair¶;" they soon recovered, and their illness at the time attracted no notice whatever.

The last, and perhaps in the present inquiry the most important of all the parties connected with the "Eclair" at Boã Vista, was the military guard stationed in the Fort during and immediately after its occupancy by the crew of that vessel.

When the crew took possession of the Fort they found a guard of three soldiers there. They had been on this post already three or four days. Their names were—

Athanasio Perez, Acting Corporal, dark mulatto, aged 26 years;

Pedro Manoel, private, negro, aged 30;

Antonio dos Santos, private, mulatto, aged 25.

This guard slept in front of the upper room occupied by the sick, and often went into it**. The corporal had a headache two days after the sick were landed, which at first yielded to cooling fomentations††. In two days more he and his comrades were relieved, and he was still rather unwell, but making no complaint was posted as a sentry at the barracks in Porto Sal Rey. He was however soon taken ill, and sent to his house

* Vide Question 7.

† Vide Questions from 8 to 138 *passim*.

‡ One died in November; her brother, who came from San Nicolao during her illness, was also attacked with fever, and died in a few days. One died in the month of December; the other two died in January, and they had nursed each other.

§ I cannot make out clearly whether the purser was sent to the Fort or to the ship. Mr. Macaulay says "he laboured under delirium tremens."

|| Vide Questions 392 to 402.

** Vide Questions 142, 157, 166.

¶ Vide Questions 369, 379.

†† Vide Question 144.

in Pao de Varella, where he was confined some weeks. His case caused no alarm, nor was he attended by any medical man, further than being seen once by Dr. Almeida during his convalescence. The other two soldiers had also attacks of fever, the one three weeks or so* after he left the Fort, and the other not until fever was general in the barracks†.

The second guard at the Fort consisted of—

Vicente da Cruz Silva, dark mulatto native, aged 29;
Manoel Antonio Alves, negro native, private, aged 18;
Luis Briza, European Portuguese, private, aged 18.

The guard was on duty at the Fort six or seven days; none of them were at all affected during this time. They however all had fever afterwards, when the disease was prevalent in the town, of which Luis Briza, the European, died.

Third guard. In the routine of duty the second guard was relieved by Corporal Joaquim Agostinho, European Portuguese;
Private João Alexandre Roque, European Portuguese; and
Private Miguel Barbosa, native negro, aged 30.

By the evidence of Miguel Barbosa, the only survivor of this guard, it appears that he and his comrades were at the Fort several days before and after its evacuation by the sick of the “Eclair.” They slept in a small cook-house under the rampart. The same day the “Eclair” left, Miguel was ordered by the corporal Agostinho to sweep out the rooms which had been occupied by the sick, and that all three of them went into the rooms on this occasion‡. According to his account, on the day after the steamer sailed, the corporal was attacked with fever and died in three days, delirious, and vomiting a black fluid. The other European, João Alexandre Roque, was similarly seized on the day following, and died on the fourth day with fever, delirium and black vomit§. Both these men were seen by Dr. Almeida, who told me they were in *articulo mortis* when he was called to them.

Pedro Manoel, a native negro soldier, was sent by Major Mascarenhas, the Military Commandant, to attend the sick soldiers at the Fort; he was with them from an early period of their illness up to the time of their death, and remained at the Fort for several days afterwards, in company with Miguel Barbosa||. Before they left the Fort some gunpowder was exploded in the rooms which the “Eclair’s” people had occupied; and it is said that they were whitewashed some time afterwards¶.

Another negro soldier, called Manoel Antonio Alves, who was on duty with the second guard, was ordered by the Commandant to bury the bodies of Agostinho and Roque. For this purpose he proceeded to the small island accompanied with Joaquim Farenga and Manoel Luis, both native soldiers. He left his comrades in the boat, and stripping himself, ran up to the Fort in a state of nudity, and there, with the assistance of Miguel Barbosa and Pedro Manoel, rolled the bodies in quilts, and carried them down to the boat, which transported them to the beach, about a mile and a half to the southward of the town, where they were buried in the sand**.

The fourth guard was constituted of this man, (Manoel Antonio Alves,) Lorenzo Samed, and Pedro Gonzalves, all native soldiers. The same boat that conveyed them to the Fort, on its return brought Miguel

* There is the greatest difficulty in obtaining anything like accurate information as to periods or dates.

† Vide Question 160.

‡ They had been constantly among the sick, and when the sick left they went over all parts of the house.

§ There is a slight discrepancy between this evidence and the report of the military commandant, with reference to the dates and the order in which the deaths occurred. By the return of the Commandant, Joao Alexandre Roque died first (on the 20th September), and the corporal on the 21st, the day after Roque. The difference, however, in no way affects the fact.

|| Vide Questions 233 to 249.

¶ Vide Question 239--248. I can only say, when I visited the Fort in April it presented little evidence of having been whitewashed or cleaned in any way.

** Vide Questions from 192 to 198.

Barbosa and Pedro Manoel to Porto Sal Rey. The Commandant, however, deemed it advisable not to admit them at once into the barracks, but sent them to a house in the upper and northern end of the town called Beira, which is a part of the District Pao de Varella.

The soldiers of the fourth guard lived in a room next to that in which the sick of the "Eclair" had been*. Manoel Antonio Alves was taken ill in the course of two days, and, strange to say, was at once conveyed to the barracks in Porto Sal Rey. Pedro Gonzalves and Lorenzo Samed were in their turn in the course of ten or twelve days, relieved from duty at the Fort. Gonzalves was taken ill with fever some days† after he returned to the barracks, and died on the 26th November. Lorenzo Samed was also attacked, and recovered after a dangerous illness.

The fifth guard at the Fort, Andre Vass and Jose Sancha, two negro private soldiers, were sent to the Fort to replace the fourth guard. Jose Sancha was attacked with fever three days after he had been there‡; upon which the Commandant resolved for a while to withdraw the guard altogether from that fatal post. Both the soldiers therefore returned to the barracks, where Vass was also taken ill in the course of three days§.

Appearance of the Fever in Porto Sal Rey.

Porto Sal Rey, the port and chief town of Boã Vista, is placed at the northern end of an extensive bay on the western side of the island. The principal part of the town is built upon a flat very little elevated above the sea. At the northern end, the basaltic rock rises about forty feet, and crops out in huge masses in the narrow streets. The soil is a mixture of sand and volcanic débris, over a calcareous sandstone abounding in shells, and overlying large fragments of basalt.

The residences of the members of the Mixed Commission Court, the military barrack and the custom-house, are in the lower part of the town, close to the sea-shore. Behind these the houses are disposed in the form of two wide streets, or rather squares; and the houses, including that of the English Consul, and some of those belonging to the Portuguese, are roomy, and well situated for ventilation.

In the upper portion of the town, which is called *Pao de Varella*, the houses are in general mere hovels, rudely built, much crowded together, and, with few exceptions, dirty. They are occupied by the lowest classes. From the total absence of any police laws, the streets here are also very filthy. A small row of four houses at the northern end of the town, near the sea, is called *Beira*; and to the sea-board frontage of Pao de Varella, there are a few good houses, to which the name of Santa Barbara has been given.

To the north-eastward of the town stands Reshee Hill, which is a mass of basalt, displaying on its northern and southern sides a beautiful columnar structure; and still further northward is Píco Reshee, which is about 900 feet above the sea-level.

The intervening space between the Reshee Hill and the town is a hollow flat, spread over an area of about a mile, with the same soil and subsoil as that in the town. The central part of this area is occupied by a salt-pan, which contains not less than 300 troughs, each a foot deep and about thirty feet square, into which the salt water is poured, there to evaporate and form salt.

During and for some weeks after the rainy season, the whole of this space is more or less inundated.

The cases of Corporal Perez, Justinian da Silva Georgio, Anna Gaspar, and Rosinha San Antao, have already been spoken of; they were all of

* Manoel Antonio Alves said they occupied the very room the "Eclair" sick had been in. Vide Question 202.

† Vide Question 263.

‡ Vide Question 277.

§ Vide Question 271.

a comparatively slight nature, and excited no attention even in the immediate neighbourhood where they occurred.

It will be recollected that Miguel Barbosa and Pedro Manoel, the negro soldiers, were, as a matter of precaution, on their return from the Fort, placed in a house in Pao de Varella, instead of being sent to their quarters in Porto Sal Rey. It is of the greatest importance that every circumstance connected with their stay here, be carefully noted, as it afterwards turned out that the very first case of fever in the town appeared in the room adjoining that in which the soldiers were lodged.

The houses in the Beira Row are divided by rough rouble partitions. The uppermost was occupied by a mulatto native woman of the name of Theresa Maria Jezus; the next by the two soldiers; the next to that by a Portuguese woman, called Anna Gallinha, and a native woman named Anna Texeira; and the other by a Portuguese man called Jose Carlos da Lisboa, a writer.

The soldiers remained at the house in Beira about eight days, and during this time they had many visitors*. They were not laid up; but it is evident that they had the germs of fever in them by the symptoms alone which were manifest while they were there, independent of the fact of their being both soon after attacked with fever†. Both of them declare that they brought nothing from the Fort, except the clothes they had on their backs, and a Portuguese flag.

Their clothes were taken by the wife of Silvester Jose Romess, a negro mason, to be washed‡. Silvester himself had also been a visitor of the soldiers when in the house at Beira; he had never been on board the "Eclair" or at the Fort, but was attacked with fever soon after the soldiers returned to the barracks§, as were also his daughter, niece, and wife, but the latter not until the fever had become general in the town.

Anna Gallinha and Joanna Texeira, who were next-door neighbours to the soldiers, were constantly with them, and the former cooked their victuals||. Anna Gallinha was attacked with fever in the course of three or four days after the soldiers left Beira, and died with high fever, delirium, and black vomit¶. It is not easy to ascertain dates with precision, but it is probable that this woman was taken ill on the 12th, and died on the 16th October.

A mulatto native called Manoel Affonso, who lived about twenty yards from Anna Gallinha's house, was taken ill with fever about the same time, and died on the 18th October; this man had not been on board the "Eclair," nor on the small island while the crew were there, but he was very strongly suspected of having had a blanket and rug from the "Eclair" in his possession**. By the evidence of John Jamieson he had been a visitor of Anna Gallinha during her illness††, but this was denied to me by the widow of Affonso. Gertrude Bent, a native mulatto woman, who had visited both Anna Gallinha and Manoel Affonso, and lived next door to the latter, was attacked with fever the day after Affonso's death, and died with the same symptoms as Anna Gallinha‡‡.

A man called Antonio Perica, who arrived at Boã Vista from Madeira, a few days after the departure of the "Eclair," and had occasionally seen Manoel Affonso during his illness, and afterwards carried his corpse as well as that of Anna Gallinha to Rabil, for the purpose of burial, was in two days afterwards attacked with fever, which proved fatal in a very few days§§. Eusebio da Luz, who had attended him (Perica) during his illness, was also seized with fever, and soon died|||.

Pulcherra Gertrude, the widow of Perica, was also attacked, but she recovered.

Theresa Maria Jezus, who lived the second door from Anna Gallinha

* Vide Questions 284 to 312.

† Vide Question 337.

‡ Vide Questions 245, 307, 317.

§ Vide Questions 316, 320.

|| Vide Questions 232, 244, 343.

¶ Vide Questions 287, 347.

** Vide Questions 289, 407.

†† Vide Question 289.

‡‡ Vide Questions 305, 331.

§§ Vide Question 381.

||| Vide Question 389.

and Anna Texeira, who had occupied the same room with her, were also at this time laid up with fever, of which they both recovered.

Maria Nazarinha, another visitor of Anna Gallinha, was taken ill, and died during the illness of Anna Texeira.

Jose Carlos de Lisboa, who occupied the other house in Beira, was taken ill some time in the latter part of October, and died in five or six days*. Among those who saw him was the son of Senhor Ignacio Carvahal, a merchant in Porto Sal Rey. This young man never had had any connexion with the "Eclair" or any of her people, nor had he seen any sick, except Lisboa, with whom he remained two nights during his illness. He was attacked with fever the day after Lisboa's death, which proved fatal on the 4th of November†. Mr. Carvahal was nursed by his mother, sister, and father, who like himself were dark mulatto natives, but not one of them was affected with fever. The father ascribed his immunity to having had an attack of fever with black vomit, in the year 1817, while at St. Domingo in the West Indies‡.

The disease had attacked several persons in Porto Sal Rey proper, or the lower part of the town, by the end of October; and some of the soldiers were sick in the barracks at this time. The force on the island is in general about forty soldiers, who, with few exceptions, are natives of the Cape de Verds. Before the late invasion of fever, there was one major and commandant, one lieutenant, and forty-one soldiers, including serjeants and corporals. Of the forty-one soldiers, thirty-two were negroes, or very dark mulattoes, and nine were European Portuguese. The whole were attacked with fever, which proved fatal to eight of the nine Europeans; two of them died at the Fort, and the other six in the barracks at Porto Sal Rey§. Of the native soldiers three died. Major Mascarenhas, the Commandant, had an attack in December, of which he soon recovered; and the Lieutenant left the island early in November. Lieutenant Santos who came to Boã Vista in November, had a severe attack of fever so late as the beginning of March. His wife and family, amounting to seven persons, were also attacked shortly afterwards; but the disease had by this time in a great measure lost its fatal character, for they all recovered||.

During the latter half of November and throughout December 1845, and part of January 1846, the disease was at its height in Porto Sal Rey, sometimes six and seven persons dying in one day.

Meanwhile his Excellency the Governor-General with his suite, several of the better class of Portuguese, and the whole of the English with the exception of six persons¶, had left Boã Vista and taken refuge in San Nicolao, Sal, San Antonio, Brava, and other islands of the group**. A rigid quarantine was also imposed upon Boã Vista.

The whole of those who left the island have I believe continued perfectly free from fever, with indeed the very notable exception of one family which returned to it in November.

Mr. Pettingal, the Arbitrator of the Mixed Commission Court at Boã Vista, who left the island on the 22nd October for San Nicolao, returned on the 11th November, under the belief that the disease had nearly if not altogether disappeared.

Mr. Pettingal and his family, consisting of his wife, and daughter a young lady about twenty years of age, were lodged for the first night on their return to Boã Vista, in the house of Mr. Macaulay, and on the following day removed to their own house. A day or two subsequently, two mulatto girls who, during the absence of the family at San Nicolao, had been in charge of the house, were both taken ill with fever; and although one was sent home immediately, the other remained in the house three days after she was attacked, and was during this time frequently visited by Miss Pettingal. Both of the mulatto women recovered; but on the 17th of November, or six days after the return of the family to Boã Vista, Miss Pettingal was seized with symptoms of fever, which in

* Vide Questions 405, 428, 632.

† Vide Questions 425 to 429.

‡ Vide Questions 432, 433.

¶ Mr. John Rendall, Vice-Consul; Mr. Kenny, Surgeon; Mr. Tait, clerk; Mrs. Learner, housekeeper; John Jamieson, storekeeper; John Dachin, Mr. Macaulay's servant.

§ Vide Return of Commandant.

|| Vide Question 506.

** Vide Table Nos. 2 and 3.

forty-eight hours were unequivocal, being marked by black vomit and retention of urine, and terminated fatally on the afternoon of the 24th November, or the seventh day from being attacked.

Miss Pettingal was sedulously attended during her illness by Mrs. Learner, an English nurse, and constantly visited by her father, mother, and Dr. Kenny, her medical attendant. The captain of an American merchant-ship, who had been at Porto Sal Rey for some weeks, very frequently visited Mr. Pettingal's house during his daughter's illness, and assisted, at least on one occasion, in shifting the bed on which she lay from one room to another. John Dachin, an English servant of Mr. Macaulay, also assisted during Miss Pettingal's illness, and slept one night in the house.

John Dachin was attacked on the 25th November, and died on the fifth day with the most malignant symptoms of yellow fever in the house of Mr. Macaulay. Mrs. Learner must have been attacked almost immediately after Miss Pettingal's death, for she died on the 27th November.

Dr. Kenny was taken ill about the same time, and also died on the 27th, at Rabil.

The American captain had violent vomiting two days after the death of Miss Pettingal, when he was put on board a small vessel and conveyed to the adjacent Island of Sal, with the view of joining his own ship. The authorities there, however, would not allow him to go on board his ship or to land, and he died on his return to Boã Vista, in the same small vessel, just as they were entering the harbour.

The results of the return of this family to Boã Vista had been already sufficiently direful; they were, however, not yet completed.

Two days after the death of his daughter, Mr. Pettingal, with his wife, embarked in a schooner called the "Livramento," and sailed for San Nicolao. During the passage he seemed completely prostrated by mental rather than physical suffering. The vessel arrived at San Nicolao on the following day, and was ordered to perform a quarantine of fifteen days at a desolate part of the island called Tarafal Bay, which greatly aggravated Mr. Pettingal's despondency. He now complained of pain in his legs, which exhibited large dark-coloured patches, acidity at stomach, general pains and yellow suffusion of the eyes; hiccup and black vomit closed the scene on the 5th December.

The "Livramento," immediately after the death of Mr. Pettingal, returned to Boã Vista, and again landed Mrs. Pettingal there. On the passage one sailor died of yellow fever, and another went on shore ill at Porto Sal Rey, where he soon died of the same disease*.

Mrs. Pettingal remained at Boã Vista till the 18th of January, 1846, when she returned to San Nicolao, where (after undergoing quarantine at Sal) she joined the family of Mr. Miller, a merchant.† In the month of February, there were still cases of fever occurring in Porto Sal Rey; but the disease now assumed a milder form. There were a few cases in March, and I saw three so late as early in April. In these there was a saffron-coloured suffusion of the eyes, but no black vomit. Two of them were blacks and the other was a European boy. They all recovered.

By the end of April Porto Sal Rey was quite free from fever.

Rate of Mortality from Fever in Porto Sal Rey.

EUROPEANS.

Portuguese—

| | | | | |
|-------------------------|---|---|---|----|
| Number exposed to fever | . | . | . | 53 |
| „ attacked with fever | . | . | . | 47 |
| „ died | . | . | . | 25 |

Ratio of deaths in the population, 1 in 2·1

Ratio of deaths in number attacked, 1 in 1·8

* Vide Question 328.

† I attended this lady during a very severe illness at San Nicolao, in the month of March.

| | | | | |
|---|---|---|---|----|
| English, including two Americans who were exposed | | | | |
| to the fever | . | . | . | 11 |
| Number attacked | . | . | . | 8 |
| „ died | . | . | . | 7 |
| Ratio of deaths in population, 1 in 1·6 | | | | |
| Ratio of deaths in number attacked, 1 in 1·1. | | | | |

| | | | | |
|-----------------------------------|---|---|---|----------------|
| French— | | | | |
| Number exposed to fever | . | . | . | 2 |
| „ attacked | . | . | . | 2 |
| Spaniards | . | . | . | 2 not attacked |

NATIVE POPULATION.

| | | | | |
|---|---|---|---|-----|
| Free | . | . | . | 666 |
| Slaves | . | . | . | 249 |
| Total | | | | 915 |
| Died, 65 free, 3 slaves | . | . | . | 68 |
| Ratio of deaths in native population, 1 in 13·4 | | | | |

The Fever at Rabil.

Rabil, which lies about four miles to the southward of Porto Sal Rey, is built upon a platform of sandstone, and is elevated about forty-five feet above the sea. It is divided into two districts, Cabeçada and Boaventura. Cabeçada contains 120 small hovels, rudely constructed of sandstone, and much crowded. The people are very poor, earning a livelihood as labourers when there is shipping in the port, carrying water, and cultivating patches in the ravine. Boaventura, or the north-eastern district of Rabil, contains seventy-nine houses; some of them are of a superior kind to those in Cabeçada, being two-storied, and resorted to as country residences by the better class of Portuguese in Porto Sal Rey. The bed of the ravine, which is immediately under the town, on its eastern side, is quite dry at Rabil nine months out of the year. During the rainy season, however, this extensive water-course, rising in the high lands round Estacia, pursuing a north-eastern course, and fed by the numerous rivulets which descend from the mountain-slopes in the neighbourhood, presents here a magnificent sheet of water, nearly a thousand yards broad; sometimes (as in 1844 and 1845) inundating Moradinha, a small hamlet opposite Rabil. About a mile below Rabil, a huge and compact embankment of sand has filled the chasm through which the water flowed to the sea; the consequence is, that part of the water percolates through the sand, and re-appears on the opposite sides of the embankment in little springs, which are eagerly sought for by the peasantry. The rest is left to stagnate on the Rabil side, and as it dries up during the hot weather, little alluvial islets are from time to time exposed, which the people avail themselves of to raise a small crop of corn. Indeed the greater part of the ravine, from Rabil downwards, is in a state of rude cultivation, and contains large green foetid pools, with all kinds of decomposing matter, the effluvia from which was most offensive when I was there in May 1846.

The men from Rabil who were employed on board the “Eclair,” at the coal-heap on the small island, and in the launches, returned to their homes every night. There is, however, no evidence of the fever having in any one instance appeared before the departure of that vessel from Boã Vista; but it is quite clear that one case at least had established itself there before any apprehension of disease had begun at Porto Sal Rey. This, the first Rabil case, although in itself not fatal, was the precursor of a considerable mortality in that town.

Luis Fortes Pathi,* whose name occurs first on the list of the labourers on board the "Eclair" from Cabeçada, returned to his house when the vessel sailed, and on the following day went to Moradinha (or Santa Cruz), a hamlet on the south-east side of the Rabil ravine, to attend the feast of the Exaltation of the Holy Cross†. This festival is observed on the 14th of September, and its celebration sometimes continues three or four days longer. While engaged in the dance on the third or fourth day of the feast, he was suddenly taken ill, and at once put to bed, where he remained several days‡; at the end of this time he was conveyed to his own house in Cabeçada, where he was confined three weeks longer§. He had general fever; pain of back, &c., but no black vomit. His daughter, a girl of twelve years of age, was attacked on the tenth or eleventh day after his return to Cabeçada, and died in three days, with suppression of urine and black vomit. Another daughter, seven years old, was next seized, and died in four days; a boy eleven years of age was next taken ill, and died on the fifth day with symptoms similar to those of his sisters. His wife was attacked the same day the boy died; the disease in her case was protracted to fifteen days' duration, and was marked in its last stage as it had been in the cases of her children, by black vomit||.

Such was the ominous commencement of the fever in the populous district, Cabeçada.

The next family attacked was that of Manoel Fachina; this man had been employed in one of the launches attending upon the "Eclair." His wife, who had been a good deal in the house of their neighbours the Pathis¶, was shortly afterwards attacked with fever, as were also his two children, and lastly himself. One of the children died** after three days' illness, the others recovered.

Joaquim Pathi, a cousin of Luis Fortes Pathi, who had also been a labourer on board the "Eclair," was attacked shortly after his cousin, whose family he had visited††. The fever ran through the family of Joaquim, all of whom recovered. Luis Delgado Nazario, who lived next door to Joaquim Pathi, had fever some time in the latter end of October. He had not been in any way connected with the "Eclair," but had visited the Pathis and Joaquim Marques, the latter of whom had also been a labourer on board the "Eclair," and died of fever on the 29th October, after only a few days' illness‡‡.

The house of Luis Pathi is situated in the most crowded part of Cabeçada, and adjoining it are the houses of Manoel Fachina, Joaquim Marques, Joaquim Pathi, and Manoel Rosa, who, after Luis Pathi's illness, were the first cases that occurred in Rabil§§. The disease soon appeared in the other parts of the town, more especially in the south-western direction.

Boaventura, the north-eastern district of Rabil, was for a considerable time free from fever. The inhabitants there were extremely careful in having as little intercourse as possible with the people of Cabeçada; and their precautions seem to have been so far effectual, for it seems highly probable that there was no case of fever in Boaventura before the 15th of November|||. On this day, Mr. Antonio da Graça Pinto was brought from Porto Sal Rey, labouring under fever; and very soon afterwards, Rosa Fortes, the servant of Mr. Pettingal, came to her father's house in Boaventura from Porto Sal Rey, also sick. About the same time, or very

* This man was generally believed to have with Manoel Affonso taken (who died at Porto Sal Rey) some clothes from the "Eclair." He however stoutly denied the accusation, and I could not bring it home to him.

† Vide Questions 656, 908.

§ Vide Question 660.

¶ Vide Question 1253.

†† Vide Question 750.

‡ Vide Questions 657, 749.

|| Vide Questions 665 to 669.

** Vide Question 1255.

‡‡ Vide Question 767.

§§ Vide Question 683, 684, 751.

||| Luis Santos Nazario states that he was seized some time in the latter end of September. His case was very slight by his own account, and nobody else seems to have heard of it. Antonio da Cruz (966) states that he was attacked he thinks early in November, which could not have been the case, as he adds—after Mr. Pinto was sick, who did not go to Rabil until the 15th November.—Vide Questions 455 to 458, 471 to 475.

shortly afterwards, a slave belonging to Cecilia da Britho, who had gone stealthily during the night to Cabeçada, was attacked with fever.

M. da Graça Pinto died on the 20th of November; and the whole of the family of Rosa Fortes were taken ill with fever. The slave died after four or five days' illness, in the house of a woman called Ambrosia, who soon afterwards fell a victim to the disease*.

The months of November and December were the most fatal in Cabeçada; and in Boaventura, from the middle of November to January. Some cases appeared in February and March. I saw two as late as the beginning of April, but the disease was then in a mild form.

Rate of Mortality from Fever in Rabil.

Cabeçada—

| | | | | | |
|-----------------|---|---|---|---|-----|
| Free population | . | . | . | . | 558 |
| Slave ditto | . | . | . | . | 7 |

Total . . . 565

| | | |
|--|---|----|
| Number of deaths among free population | . | 40 |
| „ „ slave „ | . | 1 |

Total . . . 41

Ratio of deaths in total population, 1 in 13·5.

Boaventura—

| | | | | | |
|-----------------|---|---|---|---|-----|
| Free population | . | . | . | . | 385 |
| Slave ditto | . | . | . | . | 93 |

Total . . . 478

| | | |
|------------------------------|---|----|
| Deaths among free population | . | 17 |
| „ „ slave „ | . | 5 |

Total . . . 22

Ratio of deaths in total population, 1 in 21·7

Estacia de Baixo.

This small village lies to the east-north-east of Boaventura, and on the opposite side of the ravine which it overlooks. The village is built upon a bare rock of basalt, about a hundred feet above the sea level, and the houses are, with one or two exceptions, small, but not crowded, as in most of the other villages; and from their elevated position are well exposed to the trade breeze. Good water is obtained on the south-east side of the hill. This place suffered least of all on the island, only two deaths having occurred.

The first person attacked was a woman called Felina Rosa, who was taken ill some time in the latter end of November, after returning from Porto Sal Rey. She died after four days' illness. Her brother, Jose Lorenzo, who nursed her, was seized some time in December, and was ill nearly a week, when he died with suppression of urine and black vomit. A great proportion of the people in the village had attacks of various degrees of intensity; but among a population of 256, only three deaths took place.

Moradinha, or Santa Cruz.

This small village is also on the side of the ravine, opposite to Rabil, but it is under the cliff, and during the rainy season is occasionally inun-

* Vide Question 475.

† Gustavus Fortes Varella, in whose house Luis Pathi was taken ill, says he and his wife were the first attacked. The other part of his evidence, with the exception of calling Rabil "Pao de Varella," quite agrees with the information I obtained at the village; so that there was fever there three weeks after Luis Pathi left the village.—Vide Questions 540 to 550.

dated. It was here that Luis Fortes Pathi was first taken ill in the month of September, yet no other case of fever occurred until some time in December†, when a woman called Magdalena Maria Spence came sick from Rabil, and died shortly afterwards. Her brother, Julio Gomes Centento, also died of fever; and a boy called Cæsario Antonio was taken ill, and died in January. These were the whole of the deaths that occurred among a population of 101, about half of whom are said to have been attacked with fever.

Estacia, Povoação Velha, or Old Town.

This small place is about six miles to the south-westward of Rabil, situate at the western side of Platform Hill, near its base. The town is very well supplied with water; the houses are all small, and rather irregularly built, still there is a degree of neatness and cleanliness about the village. From Rabil to Estacia, the road for two miles lies over a bed of sandstone; afterwards the ground is in a great measure covered with boulders and rough fragments of basalt rolled down from Man Mountain and the neighbouring hills. From the sea, which is about two miles distant, sand-hills extend inland nearly one mile.

Of the labourers who were employed on board the “Eclair” and at the coal-heap and in the launches, belonging to this place, two only were amongst the first attacked. Gregorio Tavares, a slave, who had been a good deal on board the “Eclair,” had fever in the house of his master (Senhor Nicolao Tavares) about the middle of November*. A man called Nicolao Soares, who had been working at the coal-heap; was attacked somewhere about the same time†.

There is however strong reason to believe that a young man a negro of the name of João Chico Fernandez, and his sister Libania, who came from Rabil sick, were the first persons that had fever in Estacia‡.

A man called Justinian da Britho, came from Porto Sal Rey to Estacia, where he shortly fell ill, and died on the 24th November§. A brother of his, called Fortunato, who had nursed Justinian, was attacked in eight days afterwards, while at Porto Sal Rey, where he died||. Another brother, of the name of Luis, who had a short time before been at Porto Praya in St. Jago, went to Estacia some time before Justinian’s death; he too was taken ill, and died on the 13th of December¶. The whole of the family (amounting to six children) of a man called Simao Antonio, who lived near and had visited Fernandez and his sister, were at this time seized, and swept off by fever**. The disease attacked nearly all in the village. By the end of March it had entirely disappeared.

Rate of Mortality from Fever in Estacia.

| | | | | | | |
|--------------------------|---|---|---|---|---|-----|
| Free population | . | . | . | . | . | 320 |
| Slave ditto | . | . | . | . | . | 8 |
| Total | | | | | | 328 |
| Deaths among free people | . | . | . | . | . | 24 |
| Ditto ditto slave | . | . | . | . | . | 0 |
| Total | | | | | | 24 |

Ratio of deaths in the whole population, 1 in 13·7.

* Vide Question 606.

† Vide Question 1350. Narcisso Soares.

‡ Vide Questions 1070, 1100, 1112, 1115.

§ Vide Question 1101.

|| Vide Question 1092.

¶ Vide Questions 1098, 1106.

** Vide Question 1119.

THE EASTERN VILLAGES.

These are three in number, viz., João Gallego, Fundo das Figueiras, and Cabeça dos Tharafes.

João Gallego, the north-westernmost, or that nearest to Porto Sal Rey, is situate in the middle of a large plain, which is covered with sand, volcanic débris, and fragments of basalt. There are hilly ranges on each side of the plain; but the town is well exposed to the trade-breeze, and is only about three miles distant from the sea. Sandstones as well as the volcanic rock are used for building. The houses are small, arranged in rows and little squares, and in some places much crowded. The custom of keeping the window (which is generally on the weather side) closed, renders the hut close and uncomfortably warm. The huts are in general whitewashed, and upon the whole are not dirty. The number of huts in the village is 133. The inhabitants cultivate a little corn, beans, and other vegetables; fish; and occasionally work as labourers in the ships at Porto Sal Rey.

Fundo das Figueiras lies at three-quarters of a mile to the south-east of João Gallego, on a rising ground of sandstone. The volcanic rock is also seen cropping out in the street. There is a chapel here; and the houses are built in the same way as those at João Gallego. The number of houses is 111.

Cabeça dos Tharafes is about half-a-mile to the southward, and a little to the westward from Fundo das Figueiras. This village also stands on a sandy elevation, and contains sixty houses.

This was the first of the three villages in which fever appeared. A young mulatto girl, daughter of a Captain Aniceto, who owns a small sloop, arrived at the village from Porto Sal Rey, where she had been living in the house of Antonio Joaquim Lima, where there was fever, and was herself the next day taken ill. The mother and sisters were in succession attacked; and a woman who lived in the house immediately behind Aniceto's, was about the same time laid up; she had however just come from Rabil. The next person attacked was an old woman called Domingos—she soon died; and on the same day three others died of fever,—viz., Paycan da Britho, Jean Olivera, and Silvesta Agora. The two former had visited the family of Captain Aniceto during their illness. The girl Aniceto and the rest of her family whom I saw and examined minutely, recovered.

João Gallego was in a state of perfect health on the 1st of November, when Pedro Moraes and Ignacio da Cruz Silva, soldiers, came from the barracks in Porto Sal Rey, where the fever was raging, to the houses of their relations in the former town. They were both laid up immediately after they arrived, and in a day or two afterwards the mother of Ignacio da Cruz was attacked with fever and died. Three others of the same family were about this time taken ill, and two of them died. A woman, called Rufina Mends, who lived close to the soldiers, was next attacked, and she also died. Then the family of Nicolo da Silva das Neves, but they all recovered*. From this neighbourhood the disease seemed to radiate in all directions through the town.

Fundo das Figueiras.

One man was said to have been ill with fever at this village in October; but it seems more probable that the first sick person there was a man called João Baptista da Cruz, who came from Rabil about the 19th of November. This man it seems had made a boast that he was proof against fever, and accordingly slept in a bed at Rabil in which two persons had died. When he was attacked at Fundo das Figueiras, Dr. Almeida, who was there, caused him and some others who were sick to be placed

* Vide Questions 476 to 482, 1579.

in a house by themselves; Dr. Almeida also prevented communication between the villages on each side João Gallego, and Cabeça dos Tharafes, and Fundo das Figueiras*.

To whatever cause it was due, there seems no doubt but that in Fundo das Figueiras there was no farther extension of the fever until the middle of December, when a man called Antonio Jose, came to the place from João Gallego, where he had left his sister on her death-bed from fever. He was soon laid up, and the fever from that time spread, as Dr. Almeida thinks, by those who nursed Jose becoming infected. Several families fled from Fundo das Figueiras at the outbreak of the fever, and I believe they all escaped. Of those who remained, upwards of two-thirds had fever. Towards the end of March a few cases remained, but by April there was no fever in the village.

João Gallego was the last resting-place of the fever in Boã Vista. In April I visited there with M. Leao, Surgeon of the second class in the Portuguese Navy, eight cases, of which two proved fatal.

By the end of April, there was no fever on any part of the island.

Rate of Mortality from Fever in the Eastern Villages.

Cabeça das Tharafes—

| | | | | | |
|-----------------|---|---|---|---|-----|
| Free population | . | . | . | . | 386 |
| Slave ditto | . | . | . | . | 23 |
| Total | | | | | 409 |

| | | | | |
|------------------------------|---|---|---|----|
| Deaths among free population | . | . | . | 31 |
| Ditto slave ditto | . | . | . | 2 |
| Total | | | | 33 |

Ratio of deaths in the total population, 1 in 12·4.

Fundo das Figueiras—

| | | | | | |
|-----------------|---|---|---|---|-----|
| Free population | . | . | . | . | 529 |
| Slave ditto | . | . | . | . | 6 |
| Total | | | | | 535 |

| | | | | |
|------------------------------|---|---|---|----|
| Deaths among free population | . | . | . | 35 |
| Ditto slave ditto | . | . | . | 0 |
| Total | | | | 35 |

Ratio of deaths in total population, 1 in 15·3.

Joao Gallego—

| | | | | | |
|-----------------|---|---|---|---|-----|
| Free population | . | . | . | . | 697 |
| Slave ditto | . | . | . | . | 25 |
| Total | | | | | 722 |

| | | | | |
|------------------------------|---|---|---|----|
| Deaths among free population | . | . | . | 48 |
| Ditto slave ditto | . | . | . | 2 |
| Total | | | | 50 |

Ratio of deaths in total population, 1 in 14·4.

Total population of the three villages . . . 1666
Ratio of deaths in the aggregate population of the
villages, 1 in 14·1.

* Vide Questions 1574 to 1576.

| | Total Resident Population. | Left the Island. | Exposed to Fever. | Died. |
|-------------------------------|----------------------------------|---------------------|-------------------------|-------|
| Europeans :— | | | | |
| Portuguese | 56 | 3 | 53 | 25 |
| English and Americans | 25 | 14 | 11 | 7 |
| French | 2 | .. | 2 | .. |
| Spaniards | 3 | .. | 3 | .. |
| Total Europeans | 86 | 17 | 69 | 32 |
| Natives :— | | | | |
| Free 3875 | 3875 | .. | 3875 | 266 |
| Slaves 434 | 434 | .. | 434 | 13 |
| Total Number* | 4309 | .. | 4309 | 279 |
| Grand Total | 4395 | 17 | 4378 | 311 |

Ratio of Mortality

| | |
|--|-----------|
| Amongst Portuguese, Spaniards, and French, who were exposed to the fever | 1 in 2·28 |
| „ English and Americans | 1 in 1·60 |
| „ Native population—Slaves | 1 in 33·4 |
| „ Free | 1 in 14·6 |
| Average mortality of native population | 1 in 15·4 |

Reappearance of the Fever at Moradinha.

On the 30th May it was reported to me by Dr. Leao, surgeon of the second class, that there were some people labouring under suspicious symptoms at Moradinha, the village in which Luis Pathi was taken ill, but in which the mortality had been remarkably small during the prevalence of the epidemic. Accompanied by Dr. Leao and John Jamieson, the Consul's storekeeper, I proceeded to the spot early the following morning, and found two persons, a girl of 14 years of age and a man about 35, with all the symptoms of a most malignant fever.

The countenance of the girl, a dark mulatto, was of a dirty lemon colour, shining through the natural darkness of the skin, made it resemble very much that of a light bronzed statue. A very strong foeter issued from the body, which tainted the room and drove us back from the door until the window was opened. She had complained much of pain along the spine, and still pointed to her head as the seat of pain. She had been bled in the arm by one of the neighbours, and all around the wound was of a greenish colour, swollen, and putrid. In the angles of the mouth there was dark frothy blood. She had had black vomiting; but this symptom had for some hours ceased. The urine was black†, as were also the fœces. The former had been voided in very small quantities. Pulse small, irregular. She had been ill seven or eight days.

The man had nearly the same symptoms, but in a milder degree, and he had not been affected with black vomit.

Being persuaded that the disease had during the epidemic manifested highly infectious qualities, we at once requested Senhor Librao, Adminis-

* To this I think 100 may be safely added. When making the circuit of the island in May, I fell in with little colonies who had fled from Rabil and the northern villages, to the amount of about sixty persons, to avoid the fever.

† Circumstances prevented a chemical examination of the urine; but it seemed to owe its colour to the same cause as the matter vomited in black vomit, namely, disorganised blood.

trador do Concelho, to have the sick put into as large a house as the village afforded; to cause a temperature of 140° Fahrenheit to be introduced into all the houses; to have the clothes of two persons who had already died burnt, and to have the village surrounded by soldiery; sending all supplies under proper precaution, and preventing ingress or egress to all except the medical attendants. On our visit to the village early the following morning, the girl was just expiring; but the man was not worse, and was reported to have rallied somewhat during the night. The nausea had in a great measure subsided under the use of small and repeated doses of quinine. The urine gradually became lighter, and increased in quantity; the headache was relieved; he took some nourishment, and was convalescent in five or six days.

There had been two other fatal cases of fever in Moradinha some days before we were aware that the fever existed there. The description of their symptoms leave no doubt of their having died of the fever which had some months before committed such ravages in the other parts of the island. A man died some time in the latter end of May; but as he had laboured under chronic disease for some time, I have not recorded his as a case of fever.

Four other cases occurred between the 1st and 3rd of June. In none of them was there black vomit; they soon passed from the continued to the remittent form, and all recovered under the use of quinine, mild aperients, and nourishing diet.

A girl called Maria dos Prazeres was the first person attacked at Moradinha on this occasion. She had visited João Gallego and the other eastern villages on the 15th of May, and returned to Moradinha where she was laid up with fever on the 20th of the same month. Her mother who slept with her one night after she was taken ill, was also attacked on the 26th and died on the 29th, after three days' illness. The girl whom we saw was called Perpetua. She had visited Maria, soon after which she was seized with fever, and died with the symptoms which have been already described, on the morning of the 1st of June.

The disease did not extend to Rabil or any of the other villages, and on the 13th of June the whole of the remaining patients were convalescent; and when I left the island on the 15th of July last, there had been no case of fever for thirty-three days, and no deaths had occurred since the 1st of June, or during a period of forty-five days.

The following is a Return of the Cases of Fever at Moradinha, between the 20th of May and the 3rd of June, 1846.

| Names. | Ages. | Colour. | When attacked. | Result. | Date. |
|-------------------------|-------|--------------|----------------|-----------|--------------|
| Maria dos Prazeres .. | 15 | Dark mulatto | May 20, 1846 | Died | May 26, 1846 |
| Rosa Nazario | 40 | Ditto | „ 26, „ | Do. | „ 29, „ |
| Vitoriano Letaó | 35 | Negro | „ 25, „ | Recovered | June 8, „ |
| Perpetua ——— .. | 14 | Dark mulatto | „ 23, „ | Died | „ 1, „ |
| Rosa Fortes | 30 | Ditto | June 1, „ | Recovered | „ 10, „ |
| Mariano da Levamento .. | .. | Ditto | „ 3, „ | Do. | „ 11, „ |
| Maria Fortes | .. | Ditto | „ 3, „ | Do. | „ 12, „ |
| Maria Magdalena .. | .. | Ditto | „ 3, „ | Do. | „ 12, „ |

Up to the period of my leaving the Cape de Verds (on the 15th July, 1846), the disease had in no case extended to any of the other islands of the group, but a rigorous quarantine was still being imposed upon Boã Vista.

I am indebted to Captain Beaufort, hydrographer to the Admiralty, for the most valuable of the instruments with which the annexed observations were taken.

The Barometer was a mountain barometer, made by Newman, which could be read off to the one-thousandth of an inch. The observations are corrected for capacities and temperature; the correction for capillarity has not been made, but as the diameter of the tube is, as I am informed by Mr. Newman, 0.15, the necessary correction is 0.044 additive in every observation.

The Dew-Point was ascertained from the dry and wetted bulb thermometer observations, calculated according to the formula of Dr. Apjohn of Dublin. The thermometers used were two beautiful instruments by Ronketti, marked to half-degree, therefore easily readable to a quarter of degree.

The other thermometers were registers accurately compared, and their errors ascertained by the standard.

Climate of Boã Vista.

As I could not find that any meteorological register had been kept at Boã Vista, the following remarks on its climate are deduced from information obtained from the more intelligent inhabitants of the island; from the generally-observed phenomenon of the trade winds in this quarter; and from tables of observations made by myself three times in the twenty-four hours, which are nearly complete for three months.

On applying to Senhor Lorenzo, the Captain of the Port and a lieutenant in the Portuguese Navy, for information relative to the climate, he sent me the following brief note, which is here correctly translated:—"The constant winds on the Island of Boã Vista are from north to east, generally from north-east, and are most strong from November till May. In August the wind is variable, but ordinarily light, and deviating occasionally a few points from north-east, returning, however, soon to that quarter. In August, September, and October, there is occasional thunder, with the wind from south-east to south-west. When the wind blows from these quarters it is light and lasts only a short time."

This occasional variation in the usual direction and force of the trade wind is quite in accordance with what has been recorded by other observers. Horsburgh gives the position of the inner margin of the north-east trade between longitude 18° and 26° west, which meridians include Boã Vista; and the influence of the fluctuations of the trade wind on the climate of that island may be better understood after looking over the following table, which shows the mean position of its inner limit for each month, together with the extreme variations recorded in the logs which that experienced navigator had access to.

| Mean Position. | Extreme Variation. | Mean Position. | Extreme Variation. |
|------------------|---------------------|---------------------|----------------------|
| January, 7 North | 5 North to 10 North | July, 12 North. | 8½ North to 15 North |
| February, 7 " | 5 " to 10 " | August, 13 " .. | 11 " to 15 " |
| March, 5 " | 2½ " to 8 " | September, 11½ " .. | 9 , to 14 " |
| April, 6 " | 4 " to 9 " | October, 10 " .. | 7½ " to 13 " |
| May, 7 " | 5 " to 10 " | November, 9 " .. | 6 " to 11 " |
| June 9 " | 7 " to 13 " | December, 6 " .. | 5 " to 7 " |

From this table it is obvious that the mean place of the inner margin of the trade wind is from July to October inclusive but little removed to the south of Boã Vista ; and that the extreme limit to which it extended in a northerly direction varied from 13° to 15° , or almost completely up to the latitude of that island ; hence it is clear how the trade from July to October may become very slight, or for a time disappear altogether.

As the sun approaches the northern tropic, the continent of Africa becomes heated to a much greater degree than the sea in the same latitudes. The air over the being continent consequently warmer than that over the sea around it, rises, and colder air flows in from the sea all round to supply its place ; hence, during the summer, the winds all along the Gulf of Guinea, and as far westward as Cape Blanco, blow from the south-west, but all more or less on shore. Coming from the sea, these winds are loaded with moisture, and its precipitation causes the heavy rains common on all that coast during the rainy season, which is coincident with these winds. The close approach of the inner margin of the north-east trade winds, and the indraught to the neighbouring continent during July, August, and September, tend necessarily to render the winds about the Cape de Verds, more especially Boã Vista (the easternmost of the group), very variable during these months.

It may therefore be said that, with occasional exceptions during summer and autumn, the north-east trade is the prevailing wind at Boã Vista during the year.

Barometric Observations.—The following are the barometric means for three months.

| | 9 A. M. | Oscillation from 9 to 3. | 3 P. M. | Oscillation from 3 to 9. | 9 P. M. |
|-------------|---------|--------------------------------|---------|--------------------------------|---------|
| April | 29.959 | —0.065 | 29.894 | +0.053 | 29.947 |
| May | 29.993 | —0.077 | 29.916 | +0.070 | 29.986 |
| June | 29.984 | —0.062 | 29.922 | +0.046 | 29.968 |

Here the diurnal oscillation is very distinct, and agrees with observations made in this country and elsewhere, in giving a greater oscillation during the two spring months than in June ; and also in giving a greater fall from 9 A. M. to 3 P. M. than the rise from 3 P. M. to 9 P. M.

Temperature and Humidity.

In deducing the following mean temperatures, &c. for each month, the means of the observations at 9 A. M., 3 P. M., and 9 P. M., and the actual mean minimum are taken. This process has given a very close approximation to the mean when applied to other observations, especially to those made at Barbadoes by my friend Mr. Lawson, Staff Surgeon of the First Class, and principal medical officer at Sierra Leone.

| | Mean Temperature. | Mean Dew Point. | Difference. | Mean daily range of Temperature. | Mean Temperature of Sea. |
|-------------|----------------------|--------------------|-------------|--|--------------------------------|
| April | 73.33 | 66.90 | 6.43 | 4.96 | 75.38 |
| May | 72.52 | 65.71 | 6.81 | 5.96 | 73.41 |
| June | 74.73 | 69.48 | 5.25 | 6.11 | |

From the above, it appears that May was nearly a degree colder than April, and the dew-point in the former month upwards of a degree lower, whilst the actual daily range of temperature was a degree higher. In May the temperature of the sea was 1·97 less than in April—a large quantity, considering that the sun was all this time advancing to the northward. On examining the daily progress of the temperature of the sea, it is found to diminish with much regularity from 76° in the beginning of April, to 73° in the end of May.

The influence of the neighbouring sea on the climate of a small island is well illustrated during April and May; for in April, with the temperature of the sea at 75° 38', the mean temperature of the month was 73° 83'; dew-point 66° 90', the mean minimum temperature 72° 27', and the daily variation of temperature in the air 4° 96' only. In May, while the temperature of the sea was 73° 41', notwithstanding the much greater power of the sun, the mean temperature fell to 72° 52', the dew-point to 65° 71', the mean minimum to 71° 22'; yet in consequence of the greater power of the sun, the maximum during the day was 77° 18'; while in April it was only 77° 23', or almost identical. Thus, in consequence of two causes, acting different ways in May, and not to the same extent in April, the diurnal variation in May was 5° 96', and in April 4° 96' only.

In June there was a considerable advance both of the temperature and dew-point. The daily range of temperature, however, was 6° 11', or nearly the same as in May. Hence it may be inferred that in June the heating power of the sun on the surface of the sea was more than sufficient to warm the cold water brought from the northward by the currents, for had this not been the case the oscillation in temperature would in all probability have been greater than in May. The mean maxima and minima for three months are:

| | April | May. | June. |
|---------------------------|-------|-------|-------|
| Maximum | 72·23 | 77·18 | 79·45 |
| Minimum | 72·27 | 71 22 | 73·34 |
| Mean Daily Oscillation .. | 4·96 | 5·96 | 6·11 |

In looking at the relative position of Boã Vista and the African coast, it is to be expected that the hygrometric records will show a high dew-point. The north-east wind in passing over the parched lands of Africa, has acquired a great capacity for moisture before it reaches the sea; however, it is still far from being saturated in passing over Boã Vista, as may be seen by a reference to the dew-point column of the tables. Still the proportion of moisture in the air of Boã Vista, although not great under the circumstances, is great compared with other places, as it exceeds that of the West Indies and Bombay during the same season, and is as much as that which was shown by my own observations on the coast of Africa from Sierra Leone to Acra during the wet season in 1841. (Vide Medical History of Niger Expedition, p. 273.)

Some rain falls in July; but the rainy season does not set in fairly until August, and it continues until November. At this period the flats near Porto Sal Rey and other parts of the island are completely inundated; and vegetation is said then to spring up with surprising rapidity. The heat is said to be very oppressive during August, September and October.

Drifting Sands.—These are very remarkable, and occupy a flat hollow space over an area of several miles between the platform under Pico Reshee and the Mountain Range. Some of the sand-hills are thirty feet high, and uniformly present a concave front to leeward, thus :



When the wind is high the sand is drifted about in all directions, and the atmosphere is loaded with sand, most annoying to the traveller by driving in his face, and obliterating all traces of road.

The natives of Boã Vista are in general above the middle size, and well formed ; many of them live to a very great age. Besides the occasional occurrence of remittent fever, during and after the rainy season, the people are now and then troubled with diarrhœa, pectoral complaints, and ophthalmia. I saw three cases of cataract. Syphilis in its most disgusting form is very common.

They have a ready and most extraordinary mode of providing wet-nurses on any sudden emergency, or when occasion requires. Any woman who has once borne a child, and is still within the age of child-bearing, is available for this purpose. The details of the process are somewhat long ; but the main part of it consists in continued fomentation of the mammæ with a decoction of the leaves of the *jatropha curcas*, and suction of the nipple. I saw the experiment tried most successfully, a copious flow of milk having been produced on the fifth day of the application of the decoction, in a woman who had not nursed, and in whose breasts there had been no milk for twenty months.

Island of Boã Vista, Cape de Verds.—Meteorological Observations.

| April 1846. | Days of the Week. | Barometer. | | | Temperature and Dew Point. | | | | | | Thermometer. | | Merid. temperature of. | | Winds. | | | | Clouds, character of. | | GENERAL REMARKS. |
|-------------|-------------------|------------|--------|--------|----------------------------|------------|--------|------------|--------|------------|--------------|----------|------------------------|-----------------|------------|--------|------------|--------|-----------------------|------|--|
| | | 9 A.M. | 3 P.M. | 9 P.M. | 9 A.M. | | 3 P.M. | | 9 P.M. | | Maximum. | Minimum. | Surface of Sea. | The Atmosphere. | A.M. | | P.M. | | A.M. | P.M. | |
| | | | | | Temp. | Dew Point. | Temp. | Dew Point. | Temp. | Dew Point. | | | | | Direction. | Force. | Direction. | Force. | | | |
| 4 | Saturday.. | 29.872 | .. | 29.891 | 74.0 | 71.0 | .. | .. | 74.0 | 70.5 | 78.0 | 74.0 | .. | .. | N.E. | 4 | N.E. | 3 | 1 | 1 | Very fine and clear throughout. |
| 5 | Sunday .. | .915 | 29.834 | .894 | 73.5 | 69.0 | 77.0 | 69.1 | 74.0 | 70.5 | 78.5 | 74.0 | .. | .. | N.E. | 3 | N.E. | 3 | 1 | 1 | Do. |
| 6 | Monday .. | .882 | .794 | .872 | .. | .. | .. | .. | .. | .. | .. | 74.2 | 76.5 | 77.0 | N.E. | 4 | N.E. | 4 | 1 | 1 | Do. |
| 7 | Tuesday.. | .882 | .794 | .872 | 74.5 | 69.0 | 77.5 | 72.5 | 74.0 | 71.0 | 80.5 | 74.0 | .. | .. | E.N.E. | 2 | E.N.E. | 3 | — | — | Fine A.M.; hazy towards evening. |
| 8 | Wednesday | .878 | .795 | .860 | 73.5 | 68.8 | 77.5 | 71.6 | 74.3 | 69.5 | 80.0 | 74.0 | 78.5 | 80.0 | E.N.E. | 3 | E.N.E. | 3 | — | — | Hazy over island; objects seen indistinctly. |
| 9 | Thursday . | .921 | .820 | .910 | 74.3 | 70.3 | 77.5 | 72.0 | 74.5 | 70.8 | 79.5 | 73.0 | 75.5 | 77.0 | N. | 4 | N. | 4 | — | — | Do. |
| 10 | Friday .. | .957 | .886 | .963 | 73.5 | 70.5 | 76.5 | 66.8 | 74.5 | 70.1 | 75.0 | 73.0 | 76.0 | 77.0 | E.N.E. | 5 | E.N.E. | 5 | — | — | Cloudy A.M.; clear weather P.M. |
| 11 | Saturday.. | .967 | .907 | .968 | 72.8 | 65.6 | 75.6 | 68.0 | 73.5 | 68.0 | 75.0 | 73.0 | .. | .. | N.N.E. | 8 | N.N.E. | 8 | — | — | Cloudy; air filled with sand. |
| 12 | Sunday .. | .978 | .960 | .968 | 72.4 | 66.6 | .. | .. | 72.0 | 65.0 | 75.5 | 72.5 | 75.0 | 76.0 | N. | 7 | N. | 7 | — | — | Heavy clouds driven to S.S.W. |
| 13 | Monday .. | 30.028 | .960 | 30.028 | 72.3 | 65.1 | 75.0 | 64.5 | 72.0 | 65.3 | 78.0 | 71.5 | 76.0 | 78.0 | N.E. | 6 | N.E. | 6 | — | — | Continued haze; air still sandy. |
| 14 | Tuesday.. | .022 | .941 | 29.992 | 72.8 | 67.0 | 75.0 | 68.3 | 72.5 | 69.0 | 76.0 | 72.0 | 75.0 | 76.5 | N.E. | 6 | N.E. | 6 | — | — | Ditto; sand hills driven about. |
| 15 | Wednesday | 29.986 | .928 | .966 | 73.5 | 66.6 | 75.5 | 67.9 | 73.0 | 68.5 | 75.5 | 72.0 | 75.0 | 76.5 | N.E. | 6 | N.E. | 6 | — | — | General haze; air sandy. |
| 16 | Thursday . | .976 | .931 | .886 | 72.8 | 67.5 | 75.5 | 67.5 | 72.5 | 65.6 | 76.0 | 72.0 | 75.0 | 76.0 | N.E. | 3 | N.E. | 2 | 1 | 1 | Do. |
| 17 | Friday .. | 30.004 | .934 | .997 | 73.0 | 67.0 | 75.5 | 66.5 | 73.0 | 67.8 | 76.0 | 72.0 | 75.0 | 76.0 | N.E. | 3 | N.E. | 3 | 1 | 1 | Fine and clear; clouds P.M. from N.E. |
| 18 | Saturday.. | 29.966 | .903 | .964 | 72.4 | 66.4 | 75.0 | 68.0 | 72.5 | 64.9 | 76.0 | 72.0 | 75.5 | 76.0 | N.E. | 4 | N.E. | 4 | 1 | 1 | Do. |
| 19 | Sunday .. | .946 | .882 | .938 | 72.5 | 65.5 | 75.5 | 66.5 | 72.5 | 65.4 | 76.0 | 72.0 | 75.0 | 76.0 | N.N.E. | 5 | N.N.E. | 5 | — | — | Cloudy; sand blown to leeward. |
| 20 | Monday .. | .942 | .894 | .932 | 72.5 | 64.8 | 76.0 | 67.0 | 72.0 | 64.3 | 76.5 | 72.0 | 75.0 | 76.0 | N.N.E. | 6 | N.N.E. | 6 | — | — | Do. |
| 21 | Tuesday.. | .945 | .869 | .948 | 71.5 | 64.6 | 75.4 | 67.8 | 72.5 | 65.6 | 77.5 | 71.5 | 75.5 | 76.0 | N.E. | 7 | N.E. | 7 | 1 | 1 | Clouds from N.E. blown strongly. |
| 22 | Wednesday | .966 | .889 | .958 | 73.0 | 67.0 | 75.0 | 66.8 | 71.5 | 63.0 | 77.0 | 71.5 | 75.0 | 76.0 | N.E. | 5 | N.E. | 4 | 1 | 1 | Fine; atmosphere sandy P.M. |
| 23 | Thursday . | .951 | .924 | .905 | 71.5 | 63.0 | 75.0 | 65.0 | 71.5 | 62.0 | 77.0 | 71.5 | 75.5 | 75.0 | N.E. | 3 | N.E. | 3 | 1 | 1 | Fine; atmosphere clear throughout. |
| 24 | Friday .. | .937 | .869 | .940 | 70.5 | 64.3 | 74.6 | 64.9 | 71.5 | 66.1 | 77.0 | 71.0 | 75.0 | 75.0 | N.E. | 2 | N.E. | 2 | 1 | 1 | Do. |
| 25 | Saturday.. | .999 | .928 | 30.008 | 71.4 | 64.6 | 74.5 | 63.8 | 72.0 | 65.1 | 77.5 | 71.5 | 75.0 | 75.0 | N.E. | 2 | N.E. | 2 | 1 | 1 | Do. |
| 26 | Sunday .. | 30.028 | .970 | .941 | 72.5 | 66.4 | 76.5 | 67.5 | 73.0 | 67.0 | 78.0 | 71.0 | 75.5 | 75.0 | N.E. | 2 | N.E. | 2 | 1 | 1 | Do. |
| 27 | Monday .. | .016 | .933 | 29.970 | 72.5 | 68.0 | 75.5 | 67.3 | 72.5 | 64.9 | 77.5 | 69.0 | .. | .. | E. | 5 | N.E. | 3 | 1 | 1 | Do. |
| 28 | Tuesday.. | 22.971 | .900 | .965 | 73.0 | 65.3 | 75.0 | 64.6 | 72.5 | 64.8 | 77.0 | 72.0 | 74.0 | 75.0 | E. | 3 | E. | 5 | — | — | Atmosphere clouded with sand. |
| 29 | Wednesday | .998 | .931 | .968 | 72.8 | 64.5 | 75.5 | 65.6 | 72.0 | 64.3 | 77.0 | 72.0 | 74.0 | 76.0 | N.E. | 4 | N.E. | 4 | 1 | 1 | Fine clear sky. |
| 30 | Thursday . | .966 | .933 | .960 | 72.0 | 63.5 | 75.0 | 67.5 | 72.0 | 65.1 | 77.0 | 72.0 | .. | .. | N.E. | 4 | N.E. | 4 | 1 | 1 | Ditto A.M.; equatorial cloud current strong P.M. |

Island of Boã Vista, Cape de Verds.—Meteorological Observations.

| May 1846. | Days of the Week. | Barometer. | | | Temperature and Dew Point. | | | | | | Thermometer. | | Merid. temperature of | | Winds. | | | | Character of Clouds. | | GENERAL REMARKS. |
|-----------|-------------------|------------|--------|--------|----------------------------|------------|--------|------------|--------|------------|--------------|----------|-----------------------|-----------------|-------------|--------|-------------|--------|----------------------|------|---|
| | | 9 A.M. | 3 P.M. | 9 P.M. | 9 A.M. | | 3 P.M. | | 9 P.M. | | Maximum. | Minimum. | Surface of Sea. | The Atmosphere. | A.M. | | P.M. | | A.M. | P.M. | |
| | | | | | Temp. | Dew Point. | Temp. | Dew Point. | Temp. | Dew Point. | | | | | Direc-tion. | Force. | Direc-tion. | Force. | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| 1 | Friday .. | 29·972 | 29·918 | 29·954 | 72·5 | 64·8 | 75·5 | 66·5 | 72·5 | 65·6 | 77·5 | 72·0 | 74·0 | 75·0 | N.E. | 6 | N.E. | 6 | — | — | Fine during forenoon; hazy, P.M., with sand in atmosphere. |
| 2 | Saturday.. | ·964 | ·879 | ·978 | 72·5 | 69·7 | 75·5 | 66·4 | 71·5 | 63·7 | 78·0 | 71·5 | 74·0 | 75·0 | E.N.E. | 6 | E.N.E. | 4 | — | — | Do. cloudy, P.M. |
| 3 | Sunday .. | .. | ·772 | ·958 | .. | .. | 75·0 | 66·0 | 72·0 | 64·2 | 78·0 | 71·5 | 74·0 | 75·0 | N.E. | 3 | N.E. | 3 | — | — | Fine and clear throughout. |
| 4 | Monday .. | ·942 | ·909 | 944 | 72·4 | 62·0 | 75·0 | 66·8 | 73·0 | 65·3 | 78·0 | 71·0 | 74·0 | 76·0 | N.E. | 3 | N.E. | 3 | — | — | Cloudy, with clouds of sand in air. |
| 5 | Tuesday .. | ·963 | ·837 | ·960 | 73·0 | 65·3 | 75·0 | 67·5 | 72·5 | 65·6 | 78·0 | 72·0 | 74·0 | 75·5 | N.E. | 3 | N.E. | 3 | — | — | Fine and clear throughout. |
| 6 | Wednesday | 30·050 | ·927 | 30·075 | 74·0 | 66·6 | 74·5 | 66·8 | 71·5 | 63·7 | 77·0 | 71·5 | 74·0 | 76·0 | N.E. | 4 | N.E. | 4 | — | — | Rather cloudy, but fine. |
| 7 | Thursday . | ·083 | ·950 | ·083 | 74·0 | 66·4 | 75·7 | 65·3 | 71·5 | 63·8 | 77·0 | 72·0 | 73·5 | 75·0 | N.N.E. | 8 | N.E. | 8 | — | — | Blowing hard; air sandy. |
| 8 | Friday .. | ·079 | ·972 | ·007 | 71·8 | 66·0 | 75·5 | 69·5 | 71·5 | 66·0 | 77·0 | 71·5 | 74·0 | 75·0 | E.N.E. | 7 | E.N.E. | 7 | — | — | Do. |
| 9 | Saturday.. | ·026 | ·990 | ·055 | 73·5 | 67·5 | 75·5 | 65·1 | 71·5 | 66·1 | 78·0 | 71·5 | 74·5 | 76·0 | N.E. | 4 | N.E. | 4 | — | — | Fine throughout. |
| 10 | Sunday .. | .. | .. | 29·981 | .. | .. | .. | .. | 71·0 | 66·0 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | Do. |
| 11 | Monday .. | 29·958 | ·900 | ·938 | 71·5 | 66·8 | 74·5 | 69·3 | 70·5 | 63·5 | 76·5 | 68·0 | .. | .. | .. | .. | .. | .. | .. | .. | Cloudy; air full of sand; sand-hills moved about. |
| 12 | Tuesday .. | ·958 | ·910 | ·998 | 72·3 | 64·6 | 74·5 | 65·8 | 71·5 | 63·0 | 77·0 | 70·0 | 73·0 | 74·5 | .. | .. | .. | .. | — | — | Fine; beautiful cirri P.M. |
| 13 | Wednesday | | | | | | | | | | | | | | | | | | | | |
| 14 | Thursday . | | | | | | | | | | | | | | | | | | | | |
| 15 | Friday .. | | | | | | | | | | | | | | | | | | | | |
| 16 | Saturday.. | | | | | | | | | | | | | | | | | | | | |
| 17 | Sunday .. | 30·009 | ·966 | 30·017 | 72·6 | 64·6 | 75·0 | 66·8 | 72·0 | 64·3 | 77·5 | 71·5 | 73·0 | 75·0 | N.E. | 3 | N.E. | 3 | — | — | Fine throughout; beautiful cirri in the equatorial cloud current. |
| 18 | Monday .. | ·009 | ·930 | ·018 | 72·5 | 64·0 | 74·5 | 67·0 | 71·0 | 64·8 | 77·0 | 72·0 | 73·0 | 75·0 | N.E. | 5 | N.E. | 5 | — | — | Fine throughout; cloudy P.M. |
| 19 | Tuesday .. | ·001 | ·955 | ·001 | 72·0 | 65·9 | 74·0 | 68·0 | 70·5 | 63·5 | 77·0 | 71·5 | 73·0 | 75·5 | N.E. | 6 | N.E. | 6 | — | — | Do. |
| 20 | Wednesday | 011 | ·948 | 29·981 | 72·0 | 64·3 | 75·0 | 67·5 | 70·5 | 63·5 | 77·0 | 71·0 | 73·0 | 75·0 | N.E. | 6 | N.E. | 6 | — | — | Do. |
| 21 | Thursday . | 29·985 | ·955 | ·963 | 72·0 | 65·9 | 73·0 | 65·3 | 71·0 | 64·8 | 77·5 | 71·0 | 72·0 | 75·0 | E.N.E. | 5 | E.N.E. | 5 | — | — | Do. |
| 22 | Friday .. | ·968 | ·897 | ·973 | 71·5 | 66·1 | 73·0 | 66·2 | 71·0 | 64·0 | 77·0 | 71·0 | 73·0 | 75·5 | N.E. | 4 | N.E. | 4 | — | — | Fine, A.M.; cloudy evening. |
| 23 | Saturday.. | ·984 | ·902 | ·981 | 72·5 | 64·8 | 73·5 | 65·9 | 71·0 | 67·2 | 76·5 | 71·0 | 73·0 | 75·0 | N.E. | 2 | N.E. | 2 | — | — | Fine and clear throughout. |
| 24 | Sunday .. | .. | .. | ·980 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | N.E. | 1 | N.E. | 1 | — | — | Do. |
| 25 | Monday .. | ·976 | ·934 | ·971 | 71·5 | 65·4 | 73·5 | 65·8 | 71·5 | 65·5 | 77·0 | 71·0 | .. | .. | N.E. | 3 | N.E. | 3 | — | — | Fine, A.M.; rather hazy, P.M. |
| 26 | Tuesday .. | ·952 | ·889 | ·928 | 71·5 | 65·5 | 74·5 | 63·2 | 71·0 | 65·0 | 77·0 | 71·0 | .. | .. | N.E. | 2 | N.E. | 2 | — | — | Beautifully clear; Sal very distinct. |
| 27 | Wednesday | ·951 | ·905 | ·936 | 71·5 | 64·6 | 75·0 | 65·9 | 70·5 | 61·8 | 78·0 | 71·0 | .. | .. | N.E. | 3 | N.E. | 3 | — | — | Do. |
| 28 | Thursday . | ·970 | ·920 | ·972 | 73·0 | 66·1 | 76·0 | 68·0 | 72·0 | 66·0 | 78·5 | 71·0 | .. | .. | N.E. | 2 | N.E. | 2 | — | — | Do. |
| 29 | Friday .. | 30·004 | ·954 | ·999 | 73·5 | 69·0 | 75·5 | 68·3 | 72·0 | 65·9 | 78·0 | 72·0 | .. | .. | N.E. | 4 | E.N.E. | 4 | — | — | Hazy, with sandy atmosphere. |
| 30 | Saturday.. | ·024 | ·960 | ·975 | 74·0 | 71·9 | 76·0 | 70·9 | 72·5 | 68·8 | 79·5 | 73·0 | .. | .. | N.E. | 5 | E.N.E. | 5 | — | — | Do. |
| 31 | Sunday .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | E.N.E. | | | | — | — | |

Island of Boã Vista, in the Cape de Verds.—Meteorological Observations.

| June 1846. | Days of the Week. | Barometer. | | | Temperature and Dew Point. | | | | | | | | Thermometer. | | Merid. temperature of | | Winds. | | | | Clouds, character of. | | GENERAL REMARKS. | | | |
|------------|-------------------|------------|-------------------|-------------------|----------------------------|-------------------|-------|------------|-------|------------|-------|------------|--------------|------------|-----------------------|----------|----------|-----------------|-----------------|-------|---|-------|------------------|------|------|--|
| | | 9 A.M. | 3 P.M. | | 9 P.M. | 9 A.M. | | | | 3 P.M. | | | | 9 P.M. | | Maximum. | Minimum. | Surface of Sea. | The Atmosphere. | A.M. | | P.M. | | A.M. | P.M. | |
| | | | Height in inches. | Height in inches. | | Height in inches. | Temp. | Dew Point. | Temp. | Dew Point. | Temp. | Dew Point. | Temp. | Dew Point. | Direc- tion. | | | | | Force | Direc- tion. | Force | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Monday .. | 29.928 | 29.861 | 29.923 | 74.5 | 70.1 | 77.5 | 71.8 | 72.0 | 69.0 | 80.0 | 73.0 | | | E.N.E. | 3 | E.N.E. | 3 | — | — | Haze; cloudy in the eveing. | | | | | |
| 2 | Tuesday .. | .981 | .891 | .963 | 75.0 | 71.3 | 77.0 | 72.0 | 73.0 | 68.5 | 80.0 | 72.5 | | | N.E. | 3 | N.E. | 3 | — | — | Haze A.M.; P.M. clear; cloudy evening. | | | | | |
| 3 | Wednesday | .972 | .919 | .942 | 73.5 | 69.8 | 77.0 | 71.9 | 72.0 | 68.4 | 79.0 | 73.0 | | | N.E. | 4 | N.E. | 4 | — | — | Ditto; clear and fine P.M. | | | | | |
| 4 | Thursday . | .991 | .909 | .953 | 73.5 | 69.0 | 76.0 | 70.9 | 72.0 | 67.5 | 79.0 | 73.0 | | | E.N.E. | 4 | E.N.E. | 4 | — | — | Ditto; clouds disposed in various strata. | | | | | |
| 5 | Friday.... | .. | .877 | .938 | .. | .. | 77.0 | 68.8 | 72.5 | 68.0 | 78.5 | 73.0 | | | N.E. | 3 | N.E. | 4 | — | — | Clear A.M.; hazy P.M. | | | | | |
| 6 | Saturday . | .947 | .879 | .935 | 75.0 | 69.1 | 75.5 | 69.6 | 72.0 | 67.5 | 78.5 | 73.0 | | | E.N.E. | 3 | E.N.E. | 3 | — | — | Haze throughout. | | | | | |
| 7 | Sunday .. | .997 | .935 | .975 | 75.0 | .0 | 77.0 | 71.1 | 73.0 | 68.5 | 79.5 | 74.0 | | | N.E. | 3 | N.N.E. | 3 | — | — | Fine and clear throughout. | | | | | |
| 8 | Monday .. | 30.009 | .935 | .973 | 75.0 | 69.1 | 78.0 | 70.5 | 73.0 | 68.5 | 79.5 | 73.5 | | | N.E. | 2 | N.E. | 1 | — | — | Do. | | | | | |
| 9 | Tuesday .. | 29.989 | .942 | .975 | 75.0 | 70.8 | 78.5 | 71.5 | 73.0 | 69.0 | 80.0 | 73.5 | | | N.E. | 2 | N.E. | 2 | — | — | Do. | | | | | |
| 10 | Wednesday | .971 | .889 | .935 | 76.0 | 70.8 | 78.5 | 69.9 | 73.5 | 68.5 | 81.0 | 73.0 | | | N.E. | 3 | N.E. | 4 | — | — | Haze A.M.; clear P.M. | | | | | |
| 11 | Thursday . | .955 | .921 | 30.004 | 76.5 | 71.5 | 79.0 | 72.5 | 74.0 | 69.0 | 81.0 | 74.0 | | | N.E. | 4 | N.E. | 4 | — | — | Do. | | | | | |
| 12 | Friday.... | 30.020 | .962 | .012 | 76.0 | 70.0 | 78.0 | 71.5 | 73.0 | 68.5 | 80.5 | 74.0 | | | N.E. | 3 | N.E. | 3 | — | — | Cloudy; sun obscured. | | | | | |
| 13 | Saturday.. | .014 | .970 | .012 | 74.5 | 67.8 | 78.5 | 71.0 | 73.0 | 68.5 | 78.5 | 74.0 | | | N.E. | 4 | N.E. | 2 | — | — | Ditto; P.M. beautiful cirri. | | | | | |
| 14 | Sunday .. | .034 | .965 | .006 | 76.0 | 68.6 | 79.0 | 68.3 | 73.5 | 68.0 | 78.5 | 74.0 | | | N.E. | 4 | N.E. | 4 | — | — | Hazy A.M.; heavy clouds P.M.; rollers heavy over the reefs. | | | | | |
| 15 | Monday .. | .046 | .996 | | 74.0 | 65.5 | 77.0 | 68.1 | 73.0 | 67.0 | 79.0 | 73.0 | | | N.E. | 4 | N.E. | 5 | — | — | | | | | | |
| 16 | Tuesday .. | 29.975 | .903 | 29.950 | 74.0 | 67.2 | 77.0 | 68.9 | 72.0 | 67.0 | 79.0 | 72.0 | | | NEbyE | 8 | NEbyE | 9 | — | — | Hazy; rollers heavy; blowing hard. | | | | | |
| 17 | Wednesday | .992 | .925 | .973 | 74.0 | 68.0 | 77.0 | 69.6 | 72.0 | 68.0 | 79.0 | 73.0 | | | N.E. | 9 | N.E. | 9 | — | — | Do. | | | | | |
| 18 | Thursday . | .986 | .941 | .983 | 74.5 | 67.3 | 77.0 | 69.8 | 73.0 | 69.5 | 79.0 | 73.0 | | | N.E. | 4 | N.E. | 4 | — | — | Hazy A.M.; P.M. fine and clear. | | | | | |
| 19 | Friday.... | .973 | .924 | .963 | 74.5 | 68.5 | 77.5 | 69.0 | 72.5 | 67.1 | 79.5 | 74.0 | | | N.E. | 4 | N.E. | 3 | — | — | Fine A.M.; hazy P.M. | | | | | |
| 20 | Saturday.. | .958 | .876 | .923 | 76.0 | 68.9 | 77.5 | 69.1 | 73.0 | 69.0 | 79.5 | 73.5 | | | N.E. | 5 | N.E. | 5 | — | — | Haze; heavy clouds in evening. | | | | | |
| 21 | Sunday .. | .963 | .895 | .943 | 74.5 | 69.4 | 77.5 | 69.5 | 72.0 | 68.0 | 80.0 | 73.5 | | | N.E. | 4 | N.E. | 6 | — | — | Ditto, with sand in atmosphere; a few drops of rain. | | | | | |
| 22 | Monday .. | | | | | | | | | | | | | | N.E. | | N.E. | | — | — | Fine. | | | | | |
| 23 | Tuesday.. | .960 | .900 | .973 | 75.0 | 69.1 | 78.5 | 71.2 | 74.0 | 69.0 | 80.0 | 73.5 | | | N.E. | 4 | N.E. | 3 | — | — | | | | | | |
| 24 | Wednesday | .970 | .879 | .933 | 75.5 | 70.1 | 78.5 | 71.3 | .. | .. | 81.0 | 74.0 | | | N.E. | 4 | N.E. | 5 | — | — | | | | | | |
| 25 | Thursday . | | | | | | | | | | | | | | N.E. | | N.E. | | | | | | | | | |
| 26 | Friday.... | .978 | .892 | .930 | 76.0 | 70.4 | 78.0 | 71.3 | .. | .. | 81.0 | 74.5 | | | N.E. | 3 | N.E. | 3 | — | — | Fine throughout. | | | | | |
| 27 | Saturday.. | .950 | .902 | .940 | 76.0 | 70.0 | 78.0 | 71.3 | .. | .. | 81.5 | 74.0 | | | N.E. | 4 | N.E. | 4 | — | — | Ditto A.M.; evening cloudy. | | | | | |
| 28 | Sunday .. | .998 | .994 | 30.033 | 79.0 | 73.5 | 79.5 | 72.3 | 75.0 | 70.0 | 81.0 | 74.0 | | | N.E. | 4 | E. | 8 | — | — | Wind shifted 3 P.M.; heavy clouds at E. | | | | | |
| 29 | Monday .. | | | | | | | | | | | | | | | | | | | | Haze; atmosphere sandy; blowing very hard. | | | | | |
| 30 | Tuesday .. | 30.035 | 30.002 | .067 | 78.0 | 72.0 | 78.5 | 72.8 | .. | .. | 81.5 | 74.0 | | | E. | 9 | N.E. | 10 | — | — | | | | | | |

Island of Boã Vista, Cape de Verds.—Meteorological Observations.

| July 1846. | Days of the Week. | Barometer. | | | | | | Temperature and Dew Point. | | | | | | Thermometer. | | Merid. temperature of | | Winds. | | | | Clouds, character of. | | REMARKS. |
|------------|-------------------|------------|----------------|---------|----------------|---------|----------------|----------------------------|------------|--------|------------|--------|------------|--------------|----------|-----------------------|------------------|-------------|--------|--------|----|-----------------------|------|--|
| | | 9 A.M. | | 3 P.M. | | 9 P.M. | | 9 A.M. | | 3 P.M. | | 9 P.M. | | Maximum. | Minimum. | Surface of Sea. | The Atmo-sphere. | A.M. | | P.M. | | A.M. | P.M. | |
| | | Height. | Temp. of Merc. | Height. | Temp. of Merc. | Height. | Temp. of Merc. | Temp. | Dew Point. | Temp. | Dew Point. | Temp. | Dew Point. | | | | | Direc-tion. | Force. | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Wednesday | 29.970 | 77.0 | 30.032 | 77.0 | 29.940 | 77.0 | 75.5 | 69.5 | 77.0 | 68.9 | 75.0 | 68.3 | 80.0 | 74.0 | .. | .. | N.E. | 9 | N.N.E. | 9 | — | — | Hazy with sand A.M. cloudy P.M. |
| 2 | Thursday | .954 | 77.0 | .901 | 80.0 | .933 | 76.0 | 75.0 | 66.6 | 75.5 | 70.2 | 75.0 | 69.8 | 79.5 | 74.5 | .. | .. | N.E. | 5 | N.E. | 5 | — | — | Ditto. |
| 3 | Friday .. | .927 | 78.0 | .926 | 80.0 | .973 | 76.0 | 75.5 | 68.0 | 76.0 | 69.2 | 75.0 | 70.0 | 80.0 | 74.0 | .. | .. | N.E. | 3 | N.E. | 3 | — | — | Ditto. |
| 4 | Saturday.. | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | Sunday .. | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | Monday .. | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | Tuesday .. | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | Wednesday | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | Thursday | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | Showers on the 9th preceded by lightning |
| 10 | Friday .. | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | Saturday.. | | | | | | | | | | | | | | | | | | | | | | | |

CONCLUDING REMARKS.

Having concluded the foregoing narrative relative to the fever which has lately prevailed at Boã Vista, it now remains for me to make such observations as have been suggested, after a careful and impartial consideration of all the circumstances that were brought under my notice; and as a main object of the present investigation is to ascertain whether the disease which visited Boã Vista was of indigenous origin, or was introduced into that island, it is necessary to determine—

The nature of the disease that affected the crew of Her Majesty's ship "Eclair," before their arrival at Boã Vista, and after they were landed at the Fort on the small island there.

Whether the disease of which the Portuguese soldiers died at the Fort, and that which afterwards appeared on the Island of Boã Vista, were identical in nature with that which prevailed among the crew of the "Eclair?"

Whether there be on the Island of Boã Vista, or on the small island in the harbour, evident physical cause to produce a disease such as that which prevailed there during the latter months of 1845, and the months of January, February, March, and April, 1846?

The state of health on the island when Her Majesty's ship "Eclair" arrived there?

Whether the history of the late invasion of fever at Boã Vista affords evidence that the disease was possessed of contagious or infectious qualities?

Under ordinary circumstances, the fever which attacks ships' crews on the African coast is the common bilious remittent. Seldom if ever has it happened that a disease characterized by black vomit has at once broken out in a ship. This malignant symptom rarely occurs, even on shore, except during some of the more severe epidemic visitations. Judging, therefore, from the result of general experience, as well as from the medical reports, it seems to me to admit of no doubt that the disease which invaded the "Eclair" in the latter end of May and early part of June 1845, was the usual endemic fever of the African coast, which although a most fatal disease, is not considered to be of an infectious or contagious nature. The mental despondency which seems to have pervaded the crew rendered them indeed peculiarly susceptible of disease, not only while on detached service in the boats up the river, but also on board the ship (around which the commonly recognized causes of fever were in great abundance), and on this account it is probable that the fever was of a more aggravated type than usual.

At Sierra Leone, the irksome and unwholesome duty of cleaning the hold of the "Albert," as well as that of their own vessel; the unwonted exposure in some cases by day and night; the irregularities committed by men who had for some months been exposed to morbid influences*; all combined to the development of a fever of a much more malignant nature than the usual endemic of the African rivers.

Accordingly, several of the cases that occurred after the ship left Sierra Leone were marked by unequivocal black vomit†—a symptom, as has been already mentioned, extremely rare in the endemic fever, and regarded by all who have served in hot climates, as a test of unusual malignancy.

It is thus quite evident that the type of the fever changed materially for the worse during the passage from Sierra Leone to the Gambia and Boã Vista. There is also great reason to believe that it acquired still greater virulence while the crew were at the Fort. The house in which the sick were lodged there contains only one room at all well ventilated; and, judging from the evidence of Dr. Almeida, they must have been much

* Vide letter of Sir Wm. Burnett to Viscount Canning, Under Secretary of State, &c.

† Vide Dr. Stewart's Report. Page 87. "Correspondence on subject of the Eclair," &c., presented to Parliament in 1846.

crowded* ; at all events, the fact is beyond doubt, that the accession to the sick list and the mortality became much greater at this than they had been at any previous period. In short, from the endemic remittent of the African coast, the disease had, from a series of causes, been exalted to a concentrated remittent, or yellow fever†.

The European soldiers who were attacked with fever so soon after the departure of the "Eclair," had arrived from Portugal in August 1844, and had been performing the usual military duties of the island, which are by no means of a laborious nature. They had never been on board the "Eclair." To state with great precision what their symptoms were is not in my power, for they were not seen by a medical man until in *articulo mortis*. The account, however, of their negro comrades, although brief, emphatically shows that the disease of which they died was an intensely malignant fever. They had general fever, delirium, and at last black vomit‡.

The same description belongs to the fever that afterwards broke out on the Island of Boã Vista. Dr. Almeida, who was present during the early period of the epidemic, and Messrs. Moraes and Leao, surgeons in the Portuguese Navy, who arrived in February, informed me that in the majority of the cases there were yellowness of skin, suppression of urine, and black vomit. The two former symptoms existed in the cases I saw at João Gallego in April, but there was no black vomit. Suppression of urine was so common a symptom, that it has been mentioned to me by all classes with whom I spoke on the subject of the fever. It is worthy of remark that according to Louis, this was an extremely rare symptom in the epidemic at Gibraltar in 1828§. It seems then hardly to admit of a doubt that the disease with which the crew of the "Eclair" were afflicted, that which proved fatal to the European soldiers at the Fort, and that which soon afterwards prevailed on the Island of Boã Vista, were identical.

I have already endeavoured to account for the malignant character assumed by the fever among the people of the "Eclair;" but it still remains to be shown how the soldiers, natives, and other inhabitants of Boã Vista, became affected with a similar disorder.

In the present state of our knowledge regarding the telluric origin of disease in warm climates, it is hard to say what kind of soil may not generate fever||, but the position of the Fort on a bare basaltic rock, the dry calcareous surface of the small island generally, its extreme aridity and free exposure to the trade breeze, would lead one to suppose that fever was at all events not likely to originate there. But the soldiers had only a week before they were seized with fever, come from Porto Sal Rey, where, at least in a theoretic view, the condition of the soil during and after the rainy season is such as may cause fever.

Assuredly many bad fevers have been attributed to less obvious causes. At Rabil, which is rather less than four miles distant, the existence of a cause is not only theoretically but practically apparent. In the neighbourhood of the Ravine there remittent fever does occasionally affect the residents, and has, during some seasons, assumed a severe and fatal form as in 1821-22, 1827 and 1833¶.

Now if the fever that raged among the "Eclair's" crew was primarily the remittent of the African coast, aggravated by circumstances to an unwonted degree of malignancy, it is quite reasonable to believe that a fever of equal intensity might be grafted on an endemic of the same

* Vide Questions 1559, 1560.

† This assumption is, I am aware, opposed to some high authorities; but it is made on a calm review of the facts of the cases before me, which seem to favour the views of those who consider a common remittent convertible into yellow fever.

‡ Vide Questions 221, 236.

§ Vide "Researches on Yellow Fever," by P. Ch. A. Louis, translated by Shattuck, page 240.

|| The late Dr. Fergusson, who paid more attention to the causes of fever than most men of his day, says "that sandy soils should in malarious climates prove as productive of aggravated remittent as the swamp, has never been sufficiently explained. Certain it is, however, that they do so, in a marked and prominent degree. The Alemtejo and Algarves of Portugal—regions, I may say, altogether of sand—are the most prolific of fever of any in the Peninsula."—Vide "Edinburgh Medical and Surgical Journal," No. 155, page 298.

¶ Vide Questions 436 to 442, 550, 551, 1549 to 1553.

nature originating on the Island of Boã Vista, whose geographical position is within the legitimate domain of yellow fever.

If then the existence of a practically efficient, as well as of a probable cause of fever on the island be admitted, it now only remains to be seen whether there is reason to suppose that either was in operation at the period in question, for if such were the case, the arrival and stay of the "Eclair" at Boã Vista with fever among her crew, and the almost contemporaneous occurrence of a similar disease on that island, can only be regarded as mere coincident events.

If on the other hand it does not appear that any local cause of disease was at this time in action, either on the small island or on Boã Vista itself, and if the subsequent history of the fever proves it to have been capable of propagating itself, then I think that under all the circumstances there will be strong grounds for concluding that the visit of the "Eclair" and the invasion of Boã Vista by fever stand in the relation of cause and effect.

While the "Eclair" was at Boã Vista there was occasional rain, and the thermometer ranged from 80° to 84°*; it does not however appear that the flat behind Porto Sal Rey was inundated until after fever broke out in the town†. Dr. Almeida, while he admits that remittent fever occurs in some seasons at Rabil, declares that he never knew it to originate at Porto Sal Rey; and his experience extends over thirty-seven years‡. The same gentleman asserts that the island was quite healthy until some time after the departure of the "Eclair," and in this he is borne out by all with whom I have communicated on the subject§.

Mr. Macaulay, to whom I am indebted for much valuable information, says "Boã Vista was free from any kind of sickness prior to the 'Eclair's' arrival, as well as during her stay there, and for a short time after her departure." Again, "Boã Vista is a remarkably healthy place, and fevers there amongst the established residents, or amongst the strangers (by which term I suppose such residents as the British functionaries and their families are referred to), are almost, if not altogether, unknown. My personal experience extends back only to the beginning of February 1844, but since that date, neither in the family of the British Arbitrator, which consisted of five English persons, nor in the family of the British Consul, which consisted of eight English persons, nor in my family, which consisted of six English persons, nor amongst the other English residents did one single case of fever occur, prior to the appearance of the disease which has lately committed such fearful ravages. The instance of the Consul's family is a very strong one; for they have lived in the island during the last seven years, without suffering in the smallest degree from the climate."

After most minute and repeated investigation at Porto Sal Rey, at Rabil, Estacia, as well as the eastern villages, I have failed to discover that there was disease of any kind on the island, until after the arrival of the "Eclair." If to testimony such as this be added the fact that Moradinha, which is situated in the Rabil Ravine, and Estacia de Baixo, which overlooks it (both of which places have always come in for a great share of remittent fever, at any time that disease was prevalent), were in a most unaccountable degree exempt from fever during the late epidemic||, then I think that the source of the disease is not to be found on the island, and therefore is to be looked for among the sick crew of the "Eclair."

The previous healthy state of Boã Vista will I think not now be questioned, nor will the occurrence of the disease in the two European soldiers at the Fort soon after the departure of the "Eclair's" people. If then the absence of all local cause on the small island, and the identity of the diseases that proved fatal to them and to the sailors be admitted,

* Vide Dr. Stewart's Report. The observations were made by Dr. Carter, of Her Majesty's ship "Growler."

† Mr. Macaulay informed me that there was a good deal of stagnant water behind the town at this time. I never saw the centre of the flat perfectly dry even in the dry season.

‡ Vide Questions 435, 1544, 1545, 1543, 1557.

§ Vide Question 442.

|| Vide Question 548.

the inevitable conclusion is, that the fever was propagated to the soldiers, either directly by contagion from the bodies of the sailors or by an infectious matter left in the room which had been occupied by the sick crew. The same reasoning applies to the Island of Boã Vista, to which it seems beyond any doubt that the fever was conveyed by the negro soldiers, and by them transmitted to Anna Gallinha and their other visitors at Pao de Varella.

The disease was for some time confined to the visitors of the negro soldiers, or the immediate neighbourhood where they lodged; and it is remarkable that Anna Gallinha and Lisboa the writer, the only two Europeans in the same row, both died. From Pao de Varella the fever can be traced to the lower part of Porto Sal Rey, eventually including nearly the whole of the population that remained in the town.

At Rabil the case was the same as at Porto Sal Rey. Luis Pathi, who had been a labourer on board the "Eclair," (and who was very strongly suspected of having had in his possession a coverlet and blanket from the Fort,) was taken ill at Moradinha, and remained there some days in the house of Gustavus Fortes Varella, who with his wife was attacked with fever three weeks afterwards*. Pathi was carried to his own house in Cabeçada, where there was not a single case of disease of any kind. In a short time† his whole household, consisting of his wife and three children, were attacked, and speedily fell victims to the fever. From this house, as from a central point, the disease spread in all directions, more especially to the south-west and most densely populated part of the village.

When the disease extended to the villages near the eastern and western extremities of the island, and had to traverse miles of uninterrupted waste of sand and rock before reaching a place of destination, its march became still more clearly defined.

At Estacia the origin of the disease was distinctly referrible to the arrival of a young man, called João Chico Fernandez, and his sister, in a sickly state from Rabil, where the fever was raging; from the house in which these two persons were lodged, and from that occupied by a man called Justinian da Silva Britho, who about the same time came from Porto Sal Rey, the fever spread over the whole of the village.

At Cabeça dos Tharafes, Fundo das Figueiras, and João Gallego, the disease could in each case be clearly traced to one or two individuals coming from an infected district, and affecting first the inmates of the house they remained at, next the visitors, and gradually extending over the whole of the inhabitants.

In fact it may be said that in each town and village on the island the disease first appeared in a single house, which became an irradiating focus for its dispersion in all quarters.

The exemption in persons who removed in time from infected places was clearly shown in many instances. Dr. Almeida by changing the residence of his family from place to place, succeeded in keeping the whole of them intact. The same gentleman for some time prevented the introduction of the disease into Fundo das Figueiras, by the establishment of a sanitary cordon; and afterwards retarded its progress by the imperfect means of segregation of the sick which he had in his power. Boaventura was for some weeks without a case of fever, although the disease was raging at Cabeçada, a few hundred yards only from it, by the adoption of measures to prevent intercourse.

When making the circuit of the island in May, I fell in with many families who had fled from the several villages at the outbreak of the fever. At a place called Espinguera, near Mount Broyal, on the north side of the island, there were three families amounting to twenty-four persons, who had left João Gallego early in November, and they had all escaped. At Cantor on the north-east base of Mount Ochello, there were fifteen people from Cabeça dos Tharafes and João Gallego, who had left these places when the fever appeared. The original number that had taken refuge here was twenty-three or twenty-four; but eight persons had impru-

* Vide Question 543.

† Ten days.

dently* returned to the villages in January; of these all had fever and four died. At a small hamlet only one mile and a half to the eastward of Cabeça dos Tharafes, there were twelve persons† from that village who had been completely exempt during the whole of the epidemic, merely by never leaving their place of refuge, and allowing no one from the villages to come near them.

Other instances of complete immunity from seclusion are on record in the evidence appended to this report‡.

From the above statements it is evident that the fever at Boã Vista possessed the properties which are usually attributed to a contagious disorder; and connecting this fact with the time and circumstances of the seizure of the soldiers at the Fort by fever, and of the appearance of the disease in Porto Sal Rey, will I think leave no doubt of its introduction into the island by the "Eclair."

Of the 87 persons§ employed on board, in the launches, and at the coal-heap on the island ten died; a rate of mortality not great, but considerably beyond the average rate of death of the native population of the island. Most of the labourers on board went below, and those at the coal-heap had free intercourse with the healthy portion of the crew, who were living, it may be said, with their sick shipmates. Yet in one case only was a labourer connected with the "Eclair," the first person attacked in any of the villages (Luis Fortes Pathi, at Cabeçada), and none of the washerwomen were among the first laid up in Porto Sal Rey. Facts such as these would indicate that the fever only propagated itself to those who approached others under its influence. The case of Pathi just mentioned, forms, however, a marked exception to this, as in his case the medium of infection seems to have been either something in the ship while the sick were on shore, or some of the healthy crew, or possibly the clothes which he is supposed to have obtained surreptitiously from the Fort. He was indeed on board when the sick were brought on board from the island, but so were also nearly the whole of the other labourers.

In other respects the case of Pathi is invested with much interest, from the fact of his having been attacked at Moradinha so early as the 17th of September, and the circumstance scarcely being known beyond the village; his being carried to his own house in (Cabeçada) Rabil, where, after a long but not violent attack he recovered, but lost the whole of his family from fever, and from this house being the nucleus from which the disease spread over Cabeçada.

There was no fever on any of the other islands, except at St. Jago, where there was the common endemic remittent, which prevails there every season during and after the rains||. There was no unusual amount of disease at Sierra Leone, the Gambia, or any other part of the coast visited by the "Eclair." In short there was no malignant fever anywhere on the African coast or among the islands, except in the "Eclair" and at Boã Vista.

In looking at the position of the Cape de Verds upon the chart, they are seen to be situated in the Atlantic Ocean, between the parallels of 14° 20' and 17° 20' north latitude, and 22° 20' and 25° 30' west longitude to the westward of Cape Verd on the coast of Africa, at distances of from two hundred miles to nearly five hundred miles from it.

Boã Vista is the easternmost island of the group, and consequently that nearest to the coast. *Sal* lies about twenty four miles to the northward of and nearly in the same longitude as Boã Vista.

* The names of those who returned were Maria Silvesta, Vicente Gonzalves, Apolicarpo dos Santos, Luis Juzardo, Urbano da Cruz, Leandro Letaó, Clemente de Barros, Elurio Letaó; the four first named are those who died.

† The families of Rosa Lopes and Francisco da Carne, at Agua dos Caballos.

‡ Vide Questions 518, 520, 534, 984.

§ Of these five were not attacked; vide 831, 984, 1161, 1221, and 1415. Five persons who left the island were not examined.

|| It has been stated that there was yellow fever at San Jago while the "Eclair" was at Boã Vista. This statement is erroneous. I have met with several gentlemen who were at San Jago at the period in question, and they all assured me that the only fever on the Island of San Jago was at Porto Praya, where the usual endemic remittent prevailed, but in no unusual degree from what is experienced during every rainy season. I allude particularly to information from a resident merchant, Mr. Joao Baptista da Cruz.

The other islands of the archipelago, eight in number, are all to the westward of Boã Vista and Sal, and are disposed in the form of two lines of four islands in each; the one line extending in a northerly and the other in a southerly direction.

To the northward, *San Nicolao* is about sixty miles west from Boã Vista. From San Nicolao, *San Lucia* bears about west by north distant eighteen miles. *San Vincente* is about eight miles further on in the same direction, and *San Antonio*, the northernmost of the group, is only ten miles from the island last mentioned.

To the southward, *Mayo* is about fifty miles from Boã Vista; *St. Jago* is sixteen miles to the westward of Mayo. *Fogo*, or *Fuego*, is thirty miles west-south-west from San Jago. *Brava*, the southernmost of the group, is ten miles to the southward and westward of Fuego.

It is thus evident that all of these islands are within a few hours' sail of each other with the north-eastern trade, which blows in this quarter with little variation throughout the year. Now had the disease depended upon general vitiation of the atmosphere over the Cape de Verds, why did Sal, San Nicolao, San Antonio and the other islands escape, while the pestilence was spreading far and wide upon the devoted Boã Vista? The supposition (if there be such) that there was an unwholesome condition of the air over the islands and corresponding portion of the African coast cannot be reasonably entertained; for it is not in the usual order of nature that a cause so generally diffused would produce an effect so merely local. An attempt has been made in a former part of this report to show that the origin of the fever on the Island of Boã Vista was not attributable to an indigenous cause, but that it was the result of the visit of the "Eclair."

I found it quite impossible to ascertain with any degree of correctness, the number of persons attacked in the several villages; but from the best information I could obtain, about two-thirds of the whole population of the island were affected by the fever. The fatal cases terminated generally with the same symptoms as those presented by Perpetua, the girl who died on the 1st of June at Moradinha. Remittent and intermittent were much less common among the convalescent whom I saw on my first arrival than I had expected; but they were generally very weak, and benefited much by quinine. This state of debility was I believe greatly owing to the famine under which the people had for some months been labouring; a circumstance which doubtless not only retarded convalescence in a great many cases, but in all probability considerably added to the rate of mortality*. A very marked improvement followed the distribution of the bountiful supplies of provisions brought by Commodore Jones in Her Majesty's ship "Penelope," and the other generous and liberal donations of corn sent from Sierra Leone and the Gambia.

Of second attacks I could only find five cases at all clearly established; from the little appreciation that the people have of time, it is not possible to arrive at the exact intervals between the attacks; their statements, however, may be seen among the examinations†.

With regard to the protective power of a first attack against a second, it is proper to mention that the natives (not naturally brave) had no hesitation, after having passed through the fever, to enter freely the houses of the sick, and that a Spanish carpenter (Andrea Gannia) and a cigar-maker (called Jose Pedro Pons), who had both had fever with black vomit, in the Havana, visited with impunity nearly every sick person in Porto Sal Rey, and also assisted in sewing the dead bodies up in sheets. Senhor Carvahal also attributed his immunity from fever while he was attending his son on his death-bed, to having had the disease at St. Domingo in 1817‡.

When speaking of the mortality from the fever, I omitted to mention that the people were for a considerable time without any medical assistance whatever. Dr. Almeida went from Porto Sal Rey to the country on

* The mortality occurred chiefly among those of from twelve to thirty-five years of age, and death took place generally between the third and seventh days.

† Vide Questions 372, 793, 1282, 1338.

‡ Vide Question 433.

the 19th of November. Dr. Kenny died on the 27th of November. The surgeon of the Governor-General left the island with his Excellency on the 1st of December, and Messrs. Moraes and Leao, surgeons in the Portuguese Navy, did not arrive from Lisbon until the middle of February 1846.

The treatment adopted by the Portuguese surgeons, including Dr. Almeida, the resident medical man on the island, was of the most simple kind. They rarely bled generally, sometimes cupped and blistered, administered diaphoretics and anti-spasmodics, and relied chiefly upon quinine and mild purges and enemata. Mercury was not exhibited in any form. As experience has, alas! too generally taught on other occasions, the bad cases were little, if at all, amenable to treatment of any kind; but great dependence was placed upon quinine in checking vomiting, whether bilious or black.

How is the reappearance of the fever at Moradinha to be explained? During the prevalence of the epidemy, there was one case of fever in the village so late as the 24th of March. An out-and-out contagionist would at once answer the question, by saying that the interval between this case and that of Maria dos Prazeres was not sufficiently long to extinguish the activity of the poison. It seems, however, more probable that Maria imbibed the fever poison in one of the houses in the eastern villages, as there were many persons there in a state of convalescence only, early in May, although there was no one there confined to bed from fever later than the end of April. If this explanation be correct, it is the only case, with the exception of that of Luis Pathi, which was brought under my notice as having been communicated without direct intercourse with the sick.

Sir William Pym and those who espouse his doctrines will contend that the fever of the "Eclair" was from the first a contagious disorder, differing essentially from the remittent of the African coast. If a disease such as that described by Sir William Pym be really endemic on the coast, surely we ought to hear more of it, considering the large squadron which is now kept there.

If it be assumed that the fever on board the "Eclair" was the Bulam, and therefore primarily contagious, I would ask where was it contracted? Not at Seabar, for in that case we would expect other vessels that visited that part of the station to be affected with a similar disease. Was it at Sierra Leone? For if so, why were not some of the many Europeans from the numerous shipping there, attacked with a fever manifesting contagious qualities? And we know that while the "Eclair" was there, there was nothing unusual either in the amount or nature of disease in the colony. The same may be said of the Gambia. Assuredly the remittent is quite destructive enough of human life; and in the late Niger Expedition, where its fatal effects were manifested in a terrible degree, there was no reason to believe that its spread was due to contagion. The whole of the surviving sick were landed at Fernando Po, after we got clear of the Niger, yet none of the residents there suffered in consequence, although many officers and men died at Clarence Cove. Why did this malignant disorder rage on board the "Eclair" and not in other vessels that were with her? Simply because her circumstances were peculiar, and it is entirely to this peculiarity and unwonted combination of circumstances that the contagionality of the fever with which her crew was affected is due. To me there is no proof that the fever in question was in any degree contagious before the vessel reached Boã Vista, and we have a right to look for proof both at Sierra Leone and the Gambia, where the evidence is against contagion. At Boã Vista the reverse is the case; for the whole history of the progress of the fever subsequent to the landing of the crew on the small island proves it to have then possessed highly infectious qualities. I would say, then, that the contagious properties which marked the "Eclair" fever at Boã Vista were acquired or contingent, and not primarily or essentially belonging to it.

It is not within my province, in drawing out this report, to follow up the history of the disease on board the "Eclair" in her progress from Boã Vista up to the period of her being paid off in England; but as much

has been said regarding the danger of introducing the malady under which the crew laboured into England, I may state that I offered to take charge of the sick, on her arrival at the Motherbank, provided they were removed into a hulk of proper size. Dr. (now Sir John) Richardson had already submitted to the Lords Commissioners of the Admiralty the propriety of having the whole of the sick transported from the "Eclair" to one of the wings of Haslar Hospital "to be appropriated exclusively for them." This humane proposal might in my opinion have been acted upon, without any risk of the public health being endangered; for the history of yellow fever in ultratropical countries shows that a continued high temperature beyond that of the summer heat of England is necessary to keep its poison in a state of activity; and that when it has prevailed at Gibraltar, Cadiz, Malaga, and Leghorn, it has always been preceded by a certain duration of high temperature. The Superintendent-General of Quarantine objected most decidedly to the sick crew being landed at Haslar, on the ground "of the disastrous consequences to the mercantile interest of this country, in the event of the 'Eclair' being admitted to pratique;" for this reason alone, "and without entering into a discussion relative to the public health," did Sir William Pym oppose the removal of the sick crew to Haslar. One would have indeed hardly expected that the Superintendent-General would have much dread of the danger of infection, from the crew of the "Eclair" being landed in the month of October in the commodious, cool, and well-ventilated wards of the finest hospital in the world, after reading in his work that the contagious powers of yellow fever "are destroyed by cold, or even by a free circulation of moderately cool air"*.

The main conclusions, from a review of the whole of the circumstances that were brought under my notice relating to the "Eclair" at Boã Vista, seem to be,—

First, That the fever on board the "Eclair" was primarily the remittent of the African coast, which is not a contagious disorder, but that the disease acquired contagious qualities in virtue of a series of causes.

Second, That although there exists on the Island of Boã Vista a physical cause capable of producing remittent fever, yet it does not appear that that cause was in action when fever broke out in September 1845, and that the island was quite healthy when the "Eclair" arrived there.

Third, That the disease of which the Portuguese soldiers died at the Fort (Duke of Braganza) on the small island, was that which afterwards ravaged Boã Vista, and the same as that which prevailed among the crew of the "Eclair."

Fourth, That the fever was propagated throughout the island almost exclusively by direct intercourse with the sick, there being only two cases in which there appears any probability of persons having been infected in any other way.

Fifth, That although those who had passed through the fever were much less liable to the disease than those who had not, yet it would appear that a person having had one attack, possesses no absolute protection against a second attack.

Sixth, That connecting the whole of the circumstances attending the arrival and stay of the "Eclair" at Boã Vista with those under which the disease appeared on the small island, and afterwards on Boã Vista itself, leaves no doubt of its having been introduced by the "Eclair."

Seventh, That in all probability the mortality from fever on the island was much increased by the want of proper nourishment for the people, as well as by the total absence of medical assistance for some months.

* Vide "Observations upon the Bulam Fever, &c.," page 2.

Eighth, That the disease had in no case spread to any of the other islands of the Cape de Verd archipelago.

(Signed)

J. O. McWILLIAM,
Surgeon, R.N.

Before leaving Boã Vista, the following suggestions were made by me to the Council of the Board of Health there:—

As the fever which has lately prevailed on this island has been proved to have possessed highly infectious properties, and as infectious matter attaches itself frequently for long periods to various substances, more especially to articles of bedding and clothing, particularly if great attention is not paid to cleanliness; it is desirable, with the view of preventing a recurrence of this formidable disease, to enforce some measures of police, in addition to those already adopted under the sanction of the Council of Health.

1st. That all accumulation of filth in the streets be at once removed; and that in future foul water and offal of all kinds be thrown into the sea, instead of being emptied upon the streets.

2nd. That the chief inhabitant of each house, be made responsible for the street in front of it being kept clean.

3rd. That fish be not gutted or cleaned except at the sea-side; or if done in the house, the offal is to be at once thrown into the sea.

4th. That pigs be not allowed in the streets, but kept in proper styes, which it would be advisable to have a little way out of the town.

5th. The practice of digging in the streets for building-stones to be discontinued, as the deep holes left become receptacles for filth of all kinds. The holes in the streets ought to be filled up before the rains commence.

6th. The houses to be whitewashed and thoroughly cleaned at least once a-month; and the bedding and clothing to be well aired at the same time.

7th. The temperature of 140° Fahrenheit has been maintained in most of the houses for eight or ten hours; they have also been whitewashed, and washed with Burnett's disinfecting solution; but in the event of any outbreak of the sickness, it will be again necessary, in addition to placing the sick in apartments separate from the healthy, to have recourse to the large fires in the house, to thorough cleaning, and the general adoption of the measures that have lately been successfully applied at Moradinha.

The above rules are recommended for the general guidance of the people, but the due performance of them is to be considered a matter of police; and for that purpose the officers of the Administrador do Concelho ought to go the rounds of the towns weekly, and report upon the condition of the houses, as well as superintend the monthly cleaning and whitewashing of houses, airing of bedding, clothing, &c.

The means of enforcing any or all of the above measures as may meet the approbation of the Council of the Board of Health, to be left to the Senhor Libraó, Administrador do Concelho, whose influence among the people, and intimate knowledge of their habits, added to his position as a magistrate, will best insure their being properly performed.

(Signed)

J. O. McWILLIAM, M.D.,
Surgeon, H.B.M. R.N.

Boã Vista, Cape de Verds, July 10, 1846.





North Point

Brazil Point

Para first appeared in town here first

Salt pan

Town of Porto Sal Rei

Salt pans

Mount Byod

Hartwell Reef

Braithwaite Island

Dutch Island

East Sand Head

Agua dos Caballos

Place of Refuge

Brazen Hill Point

Island of Boa Vista in The Cape de Verdes

Coral Velha

South Point

South Island

Nautic Miles

6 Miles

Barometric measurement
14,200.5 feet 18.
May 18th 1846.

English Road

Coral Point

Coral Reef

West Point

Sand Hills

Estancia

Platform Hill

Mar. Mountain

Sand Hills

Joao Gallego

Eastern Village

Rancho das Figueiras

Gallego

Mar. Hill

Casita das

Thoures

Agua dos

Caballos

Place of Refuge

East Hill

Small Island where Polar's landed on
13 or 16 Sep 1846
10 feet Reef

Inner Reef

Covered with Sand Hills

Bar. Hill

Bar. Hill

Bar. Hill

Bar. Hill

Bar. Hill

Bar. Hill

Bar. Hill

Bar. Hill

Bar. Hill

Bar. Hill

Bar. Hill

Bar. Hill

Bar. Hill

Bar. Hill

Bar. Hill

Bar. Hill

Bar. Hill

Bar. Hill

Bar. Hill

Bar. Hill

Bar. Hill

Bar. Hill

Bar. Hill

Bar. Hill

Bar. Hill

Bar. Hill

Bar. Hill

Bar. Hill

